

1 BELL SOUTH TELECOMMUNICATIONS, INC.
2 DIRECT TESTIMONY OF ALPHONSO J. VARNER
3 BEFORE THE TENNESSEE REGULATORY AUTHORITY
4 DOCKET NO. 97-00309
5 APRIL 26, 2002
6

7 **I. PROFESSIONAL EXPERIENCE AND EDUCATIONAL**
8 **BACKGROUND**
9

10 Q. PLEASE STATE YOUR NAME, ADDRESS, AND POSITION WITH
11 BELL SOUTH TELECOMMUNICATIONS, INC.
12

13 A. My name is Alphonso J. Varner. I am employed by BellSouth as Assistant
14 Vice President in Interconnection Services. My business address is 675
15 West Peachtree Street, Atlanta, Georgia 30375.
16

17 Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE.
18

19 A. I graduated from Florida State University in 1972 with a Bachelor of
20 Engineering Science degree in systems design engineering. I
21 immediately joined Southern Bell in the division of revenues organization
22 with the responsibility for preparation of all Florida investment separations
23 studies for division of revenues and for reviewing interstate settlements.
24

25 Subsequently, I accepted an assignment in the rates and tariffs

1 organization with responsibilities for administering selected rates and
2 tariffs including preparation of tariff filings. In January 1994, I was
3 appointed Senior Director of Pricing for the nine-state region. I was
4 named Senior Director for Regulatory Policy and Planning in August 1994.
5 In April 1997, I was named Senior Director of Regulatory for the nine-state
6 BellSouth region, and I accepted my current position in March 2001.

7
8 **II. PURPOSE OF TESTIMONY**

9
10 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS DOCKET?

11
12 A. The purpose of my testimony is to:

- 13 • Describe the performance measurements that BellSouth proposes
14 to use in this proceeding to demonstrate that BellSouth provides
15 nondiscriminatory service to CLECs in Tennessee. This is virtually
16 the same plan that BellSouth has in place in Georgia pursuant to
17 orders of the Georgia Public Service Commission ("GPSC") and
18 used to support BellSouth's application for interLATA authority in
19 Georgia.
- 20 • Present BellSouth's performance measurement data. BellSouth
21 has provided all of the available data for the last seven months and
22 has included a detailed analysis for the last three months,
23 November 2001, December 2001 and January 2002. In the future,
24 BellSouth will file performance data for successive months' results.
25 This data, beginning with November 2001, will allow the Tennessee

- 1 Regulatory Authority (“TRA” or “Authority”) to thoroughly evaluate
2 BellSouth’s performance and its compliance with the requirements
3 of Section 271 of the Telecommunications Act of 1996 (the “Act”).
- 4 • Explain the Self-effectuating Enforcement Mechanism (SEEM) that
5 BellSouth proposes for use in Tennessee concurrent with
6 BellSouth’s exercise of an FCC grant of InterLATA authority. This
7 SEEM is the same plan that BellSouth has in place in Georgia
8 pursuant to an order of the GPSC and used to support BellSouth’s
9 application for interLATA authority in Georgia.
 - 10 • Describe the scope and results of the third party audit of BellSouth’s
11 performance measurements in Georgia as evidence of the reliability
12 of BellSouth’s data.

13

14 **III. OVERVIEW OF TESTIMONY**

15

16 Q. PLEASE PROVIDE AN OVERVIEW OF YOUR TESTIMONY.

17

18 A. As the Authority is aware, BellSouth must demonstrate that it provides
19 nondiscriminatory performance to CLECs as a prerequisite to the receipt
20 of permission to compete in the interLATA market in Tennessee.
21 Measurement of the performance level provided to the CLECs is one
22 factor in demonstrating nondiscriminatory performance.

23

24 My testimony presents an interim comprehensive set of service quality
25 measurements (“Interim SQM”) upon which the Authority can and should

1 rely in this proceeding. Using actual performance results based on this
2 Interim SQM, I explain why it is reasonable to conclude that BellSouth
3 meets its obligations under the Act. I have also proposed an Interim SEEM
4 to be used after BellSouth is granted interLATA authority by the FCC. For
5 expediency, BellSouth is proposing the Georgia SEEM for use on an
6 interim basis. BellSouth does not advocate this SEEM because it is
7 unnecessarily punitive. However, given the Authority's ongoing generic
8 performance measurements docket, it will only be effective a short time
9 and the merits have already been debated.

10
11 My testimony also shows that BellSouth's performance data are reliable.
12 BellSouth has internal validation procedures to ensure that it produces data
13 that provide a meaningful yardstick by which the Authority can assess
14 BellSouth's performance. In addition, the Georgia Third Party Metrics Test
15 results support BellSouth's position that its data is reliable. In addition,
16 while BellSouth relies on the Georgia Third Party Metrics Test only, results
17 from the Florida audit will also be addressed. The Florida test
18 corroborates the findings of the Georgia test that BellSouth's performance
19 data is a reliable means to assess whether is providing nondiscriminatory
20 performance.

21
22
23 **IV. PERFORMANCE REPORTING PLAN**

1 Q. BRIEFLY DESCRIBE BELL SOUTH'S PERFORMANCE REPORTING
2 MECHANISM.

3
4 A. The Act ([§ 271, 47 U.S.C.271, Part III, subparagraph (B)]) as interpreted by
5 the FCC in its First Report and Order (FCC 96-325 dated 8-8-96)),
6 obligates BellSouth to provide CLECs with nondiscriminatory access to
7 the items specified in the 14-point checklist, including Operations Support
8 Systems ("OSS"). Over the last four years, as a result of a Generic
9 Performance Measurements proceeding and Order in Georgia, in which
10 many of the CLECs in this Docket were participants, BellSouth has
11 developed a comprehensive set of performance measures. These
12 performance measures are collectively referred to as the Service Quality
13 Measurements (SQM) plan. Specifically, the performance measurements
14 plan that BellSouth proposes for use in this proceeding is referred to
15 herein as the "Interim SQM."

16
17 The Interim SQM defines the measurement requirements including such
18 parameters as the service performance data to be collected, the method of
19 calculation, the amount of detail or levels of disaggregation for each
20 measurement and the applicable benchmark and/or retail analog for
21 comparison.

22

23

24 Q. HAS THE TRA ADDRESSED THE ISSUE OF PERFORMANCE
25 MEASUREMENTS PRIOR TO THIS PROCEEDING?

1

2 A. Yes. The Authority addressed the issue of performance measurements as
3 part of the Generic Performance Measurements proceeding (Docket No.
4 01-00193). During the April 16, 2001 Directors' Conference, the Directors
5 voted to adopt, as part of that docket, a permanent set of performance
6 measurements and enforcement mechanisms for use in Tennessee.

7

8 Q. WHY DOES BELL SOUTH PROPOSE A SET OF PERFORMANCE
9 MEASUREMENTS FOR USE IN THIS PROCEEDING DIFFERENT
10 FROM THOSE PROPOSED IN THE GENERIC PERFORMANCE
11 MEASUREMENTS DOCKET?

12

13 A. At this time, BellSouth proposes a different set of performance
14 measurements for use in this proceeding primarily for data availability
15 reasons. Data calculated according to measurements adopted in the
16 Tennessee Generic docket will not be available for use in this proceeding;
17 indeed, such data will not be ready for several months. However, BellSouth
18 currently is in compliance with the competitive checklist. Consequently, this
19 Authority needs to review performance data to assess BellSouth's
20 performance. The only practical way to provide timely performance data in
21 this proceeding is for the Authority to adopt an interim set of
22 measurements until its permanent measures can be implemented.

23

24 Moreover, today, pursuant to the Interim SQM, BellSouth produces a
25 voluminous set of performance data covering all the key facets of a

1 CLEC's operation. This data is more than sufficient for the Authority to
2 assess BellSouth's compliance with section 271 of the Act. The data is
3 displayed in the same format that was used in support of BellSouth's
4 interLATA application for Georgia and Louisiana. Thus this format is
5 familiar to the FCC and to the CLECs.

6

7 Q. HAS ANY OTHER STATE COMMISSION ADOPTED THE PROPOSED
8 PERFORMANCE MEASUREMENTS ON AN INTERIM BASIS FOR
9 PURPOSES OF ASSESSING 271 COMPLIANCE AFTER A
10 PERMANENT SET OF METRICS HAD BEEN ADOPTED IN THAT
11 STATE?

12

13 A. Yes. Notwithstanding the fact that it had established permanent
14 performance measurements, the Louisiana Public Service Commission
15 (LPSC) adopted the proposed set of performance measurements,
16 approved by the GPSC, on an interim basis for purposes of assessing 271
17 compliance. The LPSC Staff recommended, and the Commission
18 adopted, the Georgia SQM as the SQM used as the basis for its positive
19 interLATA recommendation.

20

21 Q. PLEASE DESCRIBE THE INTERIM SQM THAT BELL SOUTH
22 PROPOSES TO PROVIDE PERFORMANCE DATA FOR THIS
23 PROCEEDING.

24

25

1 A. The Interim SQM defines the measurements that BellSouth proposes to
2 support its application for interLATA authority with the FCC. The
3 presentation of the data, called the Monthly State Summary (MSS), is
4 defined by the Interim SQM. The Interim SQM is attached as Exhibit AJV-
5 1. For brevity, I will refer to the presentation of data according to the Interim
6 SQM as the "MSS format." Since that SQM was adopted, the GPSC
7 ordered data for LNP collected pursuant to additional measurements.
8 These measurements are described in Exhibit AJV-2. BellSouth has
9 provided data for two of these measurements in Tennessee for November
10 2001 – January 2002, reflected in Exhibit AJV-3, Checklist Item 11. Data
11 for the third measurement, P-13D, will be provided beginning with March
12 2002 data.

13

14 **V. THE PERFORMANCE MEASURES CONTAINED IN THE INTERIM**
15 **SQM**

16

17 Q. PLEASE EXPLAIN THE CONTENTS OF THE INTERIM SQM
18 DOCUMENT AND HOW TO READ IT.

19

20 A. BellSouth's Interim SQM document, the same SQM implemented by the
21 GPSC in April 2001, is a comprehensive and detailed description of
22 performance measurements that are calculated to evaluate the quality of
23 service delivered to BellSouth's customers, both wholesale and retail. The
24 SQM is divided into eleven (11) measurement categories, each one
25 representing a different group of measurements relating to a specific area

1 of BellSouth's service performance for CLECs. For instance, Section 1
2 contains six (6) distinct measurements dealing with access to Operations
3 Support Systems for both pre-ordering and maintenance & repair and loop
4 makeup. Section 2 contains fifteen (15) measurements specifically
5 directed at all phases of the ordering process. Another section deals with
6 provisioning, and so forth. The end result is eleven measurement
7 categories totaling 75 measurements. When these measurements are
8 produced as BellSouth has proposed, there are approximately 2,300 sub-
9 metrics reflecting the performance provided to CLECs by BellSouth.

10

11 In addition, there are three (3) appendices, A-C. Appendix A, Reporting
12 Scope, provides service groupings by categories, i.e., service order
13 activity type, pre-ordering query type, maintenance query type, etc.
14 Appendix B, Glossary of Acronyms and Terms, is just that, a glossary that
15 provides definitions for the most commonly used acronyms and terms
16 found throughout the document. Finally, Appendix C, BellSouth Audit
17 Policy, sets forth BellSouth's audit policy for both internal and external
18 audits of performance measurements.

19

20 Q. CAN YOU ILLUSTRATE WHAT IS CONTAINED IN EACH OF THE
21 MEASUREMENTS WITHIN THE ELEVEN SECTIONS BY PROVIDING
22 AN EXAMPLE?

23

24 A. Yes. Please refer to the first measurement labeled "OSS-1" of Exhibit
25 AJV-1 and the material related to that measurement. As you can see, this

1 measurement begins with a “Definition” that briefly describes the
2 measurement. In this case, the measurement calculates the average
3 response time for queries submitted from pre-ordering Interfaces, such as
4 LENS, TAG and RNS, to certain legacy systems. These queries are
5 submitted by the CLEC and by BellSouth retail representatives to assess
6 feature availability, validate addresses or telephone numbers, reserve
7 telephone numbers, and determine appointment availability.

8
9 Following the definition are any “Exclusions” that identify certain
10 characteristics or external factors that for various reasons should be
11 excluded from the measurement. In this case there are none. However, if
12 you look at the measurement labeled “Loop Makeup – Response Time –
13 Manual” in Exhibit AJV-1, there is an example of an exclusion. Specifically,
14 the exclusion for that measurement covers electronically submitted loop
15 makeup inquiries. Obviously, it would be inappropriate to include
16 electronically submitted inquiries in a measurement of inquiries submitted
17 manually.

18
19 Returning to my discussion of the components of the measurement labeled
20 OSS-1, next comes the “Business Rules” that describe the components of
21 the measurement and how they interact. An example that is reflected under
22 this measurement is the way the “start” and “stop” times are defined for the
23 measurement.

24
25

1 Under the heading of “Calculation” is the actual mathematical formula for
2 producing the measurement. This section also identifies each component
3 of the formula, e.g., in this particular case, a = Date & Time of Legacy
4 Response and b = Date & Time of Legacy Request.
5
6 The next section is labeled “Report Structure.” The report structure
7 provides a definition of the key dimensions of the report. For instance, in
8 the example of the OSS Response Interval, OSS-1, OSS Response is a
9 measurement of the response interval for the aggregate of all CLECs in the
10 BellSouth Region. As a result, its report structure is a regional structure, as
11 opposed to a CLEC-specific or a product-specific structure.
12
13 Following “Report Structure” is the “Data Retained” section that describes
14 key elements of data for each measurement that are processed and
15 retained in the performance measurements reporting platform.
16
17 Finally, the section entitled, “SQM Disaggregation – Analog / Benchmark,”
18 defines how each measurement is broken-down into sub-metrics in the
19 report, i.e., disaggregation. In this case, by OSS and Legacy System, and
20 the standard to which BellSouth compares each sub-metric of that
21 measurement in order to detect disparate treatment. In this case, because
22 there is not a comparable retail measurement for this function, BellSouth
23 uses a benchmark of parity plus 2 seconds.
24
25

1 This SQM also has a section labeled SEEM Disaggregation/Benchmark.
2 SEEM stands for Self-Effectuating Enforcement Mechanism, the
3 enforcement plan ordered by the Georgia Public Service Commission. As
4 I mentioned earlier, this Interim SQM is the Georgia version adopted in
5 April 2001. For the SEEM, no penalties apply for measure P-13, LNP
6 Average Disconnect Timeliness. Also, SEEM does not apply as a Tier 2
7 measure Service Order Accuracy.

8

9 Q. PLEASE ILLUSTRATE HOW THE LEVEL OF DISAGGREGATION
10 AFFECTS THE NUMBER OF SUB-METRICS IN AN SQM.

11

12 A. Achieving an appropriate level of disaggregation is obviously important.
13 Indeed, reporting of the measurement data occurs only at this level. To
14 illustrate, please refer to the measurement P-4, Order Completion Interval
15 (OCI) & Order Completion Interval Distribution on page 3-10 of Exhibit
16 AJV-1. OCI measures how long it takes BellSouth to install a service,
17 once a valid service order has been generated. Exhibit AJV-1 contains the
18 SQM disaggregation and reporting level for this measurement. The first
19 line of this table shows a line for Resale Residence and a retail analog of
20 Retail Residence. This means that OCIs for services to be resold to a
21 residence customer by a CLEC (Resale Residence) are compared to
22 OCIs for services sold by BellSouth at retail to its residence customers
23 (Retail Residence). This single comparison, however, is further broken
24 down into sub-metrics of: 1) Dispatch < 10 circuits; 2) Dispatch \geq 10
25 circuits; 3) Non-dispatch < 10 circuits; and 4) Non-Dispatch \geq 10 circuits.

1 These additional levels of disaggregation are reflected under the Report
2 Structure section of the SQM for this measurement. Thus, there are 4
3 “volume” and “dispatch” levels of disaggregation in this instance. There are
4 a total of 27 lines or products on the SQM Level of Disaggregation,
5 meaning that there are approximately 27 times 4 (or approximately 100)
6 sub-metrics of BellSouth’s performance for CLECs for the single
7 measurement, P-4, Order Completion Interval. In addition, BellSouth must
8 produce another set of 100 sub-metrics reflecting BellSouth’s performance
9 for its retail customers for a total of approximately 200 sub-metrics in this
10 case.

11

12 **VI. TENNESSEE PERFORMANCE MEASUREMENT DATA**
13 **DEMONSTRATE THAT BELL SOUTH IS FULLY COMPLIANT WITH**
14 **THE SECTION 271 CHECKLIST**

15

16 PERFORMANCE RESULTS

17

18 Q. PLEASE SUMMARIZE BELL SOUTH'S PERFORMANCE RESULTS
19 FOR NOVEMBER 2001 THROUGH JANUARY 2002.

20

21 A. Exhibit AJV-3 contains a detailed analysis of BellSouth’s performance
22 results for the months November 2001 through January 2002 and a Monthly
23 State Summary for each of the months July 2001 through January 2002.
24 The MSS contains 2,328 sub-metrics based on the Georgia Public Service

25

1 Commission (GPSC) Docket 7892-U. The following is a summary of the
2 November 2001 through January 2002 results reflected in Exhibit AJV-3.
3
4 In November 2001, BellSouth met or exceeded the benchmark/retail
5 analogue criteria for 642 of 760 sub-metrics, or 84%, for which there were
6 both established benchmarks/retail analogues and CLEC activity. In
7 December 2001, BellSouth met or exceeded the benchmark/retail
8 analogue criteria for 606 of 690 sub-metrics, or 88%, for which there were
9 both established benchmarks/retail analogues and CLEC activity. In
10 January 2002, BellSouth met or exceeded the benchmark/retail analogue
11 criteria for 650 of 727 sub-metrics, or 89%, for which there were both
12 established benchmarks/retail analogues and CLEC activity.
13
14 During the three-month period, November 2001 through January 2002,
15 there were a total of 646 sub-metrics that had CLEC activity for all three
16 months and that were compared with either benchmarks or retail
17 analogues. Of these 646 sub-metrics, 586 sub-metrics (91%) satisfied the
18 comparison criteria in at least two of the three months.
19
20 BellSouth's performance results are equally strong for each of the major
21 modes of entry in Tennessee. BellSouth's results in the following
22 categories are based on the percentage of all sub-metrics that had CLEC
23 activity for all three months and met or exceeded the statistical criteria for
24 at least two of the last three months (November 2001 – January 2002)
25 included Exhibit AJV-3.

1

2

- For Resale, BellSouth met or exceeded the criteria for 139 of the 152 sub-metrics or 91% for at least two of the last three months,

3

4

- For UNE, BellSouth met or exceeded the criteria for 323 of the 349 sub-metrics or 93% for at least two of the last three months,

5

6

- For Local Interconnection Trunks (LIT), BellSouth met or exceeded the criteria for 24 of the 26 sub-metrics or 92% for at least two of the last three months,

7

8

9

- For OSS, BellSouth met or exceeded the criteria for 73 of the 85 sub-metrics or 86% for at least two of the last three months,

10

11

- For Collocation, BellSouth met or exceeded the criteria for 3 of the 3 sub-metrics or 100% for all three of the last three months, and

12

13

- For the coordinated conversions (*i.e.*, hot cuts) BellSouth met the 15 minute benchmark for 1,348 of the 1,352 scheduled conversions (B.2.12) or greater than 99% for the three month period of November, December 2001 and January 2002. The average interval for each cutover was 2.83 minutes during this period.

14

15

16

17

18

19

Exhibit AJV-4 provides an additional summary of Tennessee performance results, based on certain key measurements, for November 2001 through January 2002.

20

21

22

23

Q. IN REVIEWING THE PERFORMANCE RESULTS INCLUDED IN THIS FILING, ARE THERE ANY ADDITIONAL FACTORS THAT THE AUTHORITY SHOULD CONSIDER?

24

25

1

2 A. Yes. Two general issues can impact the degree to which BellSouth's
3 performance data are meaningful. First, the extensive disaggregation of
4 the data ordered in the report often dilutes the universe size of individual
5 measurements, which in turn reduces the confidence level of each of the
6 individual modified Z-test results. As a result, there are many performance
7 measurements for which the results are statistically inconclusive due to the
8 small number of observations. Second, in situations for which there are a
9 large number of observations and the difference between the means is
10 very small, the results of the modified Z-test can be misleading and not
11 indicative of the absolute level of performance that BellSouth provides to
12 CLECs.

13

14 With respect to the first issue, in many cases, the extensive disaggregation
15 leads to numerous sub-metrics with fewer than 30 observations, which is
16 generally accepted as the smallest number of observations for application
17 of the Z-test or an unadjusted benchmark. BellSouth has reported results
18 for all of the measures, even those with statistically inconclusive universe
19 sizes.

20

21 The second issue arises in situations in which BellSouth provides very high
22 quality service to both BellSouth and the CLECs, there are very large
23 universes, and the difference between the means is very small. Where the
24 standard is a retail analogue, this scenario can cause an apparent missed
25 condition from a quantitative viewpoint. For example, in November 2001,

1 the Percent Missed Installation Appointments, Non-Dispatch for Loop and
2 Port Combinations (B.2.18.3.1.2) showed that BellSouth retail had 0.05%
3 missed appointments for 253,358 orders. The CLEC misses for the same
4 period is 0.14% out of 3,458 orders.

5 While there is only 0.09% difference in the results, the universe is so large
6 that the Z-test becomes overly sensitive to any difference. As a result, the
7 statistical test shows that the measurement missed the standard criteria
8 but BellSouth's actual performance is at a very high level for both the
9 CLECs and BellSouth retail, in this case greater than 99.8%. From a
10 practical point of view, the CLECs' ability to compete has not been
11 hindered even though the statistical result does not technically meet the
12 retail analogue.

13
14 BellSouth's Tennessee performance results are strong when viewed at
15 face value. But, more importantly, when the reasons for the performance
16 misses are examined, BellSouth's performance becomes even stronger
17 than the simple percentage of standards met indicates. In reviewing the
18 data, the Authority should not evaluate BellSouth's performance solely on
19 the "yes/no" indicators found on the MSS reports for equity determinations
20 or the summarized percentages provided, but rather conduct a qualitative
21 assessment of the measures that considers universe size, distributional
22 properties of the data, as well as overall performance.

23

24 MEASUREMENT ISSUES

25

1 Q. IS BELL SOUTH'S PERFORMANCE DATA PERFECT?

2

3 A. BellSouth's performance data is not perfect, and given the enormous
4 amount of data that BellSouth reports each month, one should not expect it
5 to be. That being said, however, the problems with the data are
6 insignificant and, in no way impact the Authority's ability to use the data as
7 a meaningful yardstick by which to assess BellSouth's performance. Out of
8 the thousands of metrics for which BellSouth reports data, BellSouth only
9 has a limited number of issues, none of which affects the overall reliability
10 of BellSouth's performance data. As the FCC has made clear, Section
11 271 does not require perfection – either with respect to performance or
12 performance data. *SWBT-Texas Order* ¶358 (notwithstanding a “handful”
13 of data problems, the FCC found SWBT's performance data to be
14 reliable).

15

16

17 Q. ARE THERE MEASURES THAT THE AUTHORITY SHOULD NOT RELY
18 UPON?

19

20 A. Yes. Three measures do not provide meaningful information. The
21 problem with these measures has nothing to do with the accuracy of the
22 data. The problem is that the measures, as constructed and reported, do
23 not measure anything meaningful with respect to BellSouth's performance.
24 These measures are Average Jeopardy Notice Interval, LNP Average
25 Disconnect Timeliness Interval and FOC/Reject Response Completeness-

1 Multiple Responses. The remaining measurement issues, as mentioned,
2 are minor and have little impact on the reported results. These issues are
3 included in the attached Exhibit AJV-16.

4
5 Q. PLEASE EXPLAIN WHY YOU SAY DATA FOR AVERAGE JEOPARDY
6 NOTICE INTERVAL IS NOT USEFUL.

7
8 A. Currently, this measure is being calculated accurately as the difference
9 between the date/time that the jeopardy notice is issued and the date/time
10 of order completion. BellSouth consistently meets the performance
11 standard for this measurement; however, this calculation does not provide
12 a meaningful measure. The CLEC needs to know in advance of the
13 original due date whether an order is in jeopardy and the measure should
14 reflect that interval. To capture the relevant interval, the “stop” timestamp
15 for this metric should be the date/time of the originally scheduled due date
16 on the service order. In basic terms, the interval should be based on the
17 original commitment due date, not on the final order completion date.
18 BellSouth implemented the legacy system data feeds and SQM
19 programming changes required to change the calculation of this metric
20 effective with February 2002 data. Before February 2002, the Authority
21 should use BellSouth’s performance on Missed Installations Appointments,
22 as it is sufficient to gauge BellSouth’s performance in this area. A
23 Jeopardy is simply an early warning to the CLEC of the potential to miss an
24 installation appointment due to facility shortage. The significant customer-
25 impacting event is whether the appointment was met.

1

2 Q. WHY DOES BELL SOUTH BELIEVE THAT THE LNP AVERAGE
3 DISCONNECT TIMELINESS METRIC IS NOT MEANINGFUL?

4

5 A. The measure does not accurately reflect the end user's experience. On a
6 great majority (generally over 90%) of LNP orders, BellSouth sets what is
7 referred to as a "trigger" in conjunction with processing the service request.
8 This trigger order results in the provisioning of a line-level USOC for the
9 soon-to-be-ported end user line(s) in the BellSouth host switch. The USOC
10 forces a database query to one of BellSouth's Service Control Points
11 ("SCPs") for a local routing number ("LRN") on all incoming intra-switch
12 calls. Prior to the conversion, the database query will return an LRN that
13 will continue to route intra-switch calls to the original end user line on the
14 BellSouth switch. Following conversion, the SCP database query will
15 return a new LRN forcing the former BellSouth host switch to route these
16 incoming intra-switch calls to the new CLEC host switch. Maintaining the
17 end user's ability to receive intra-switch calls during the conversion
18 process is not dependent upon BellSouth issuing or completing a
19 disconnect order, and outgoing calls should not be impacted as part of
20 normal number porting activities (unless the CLEC incorrectly provisions its
21 switch translations or routing numbers).

22

23 Likewise, end users being ported to a CLEC via a trigger-based order will
24 also maintain the ability to receive calls from customers served by other
25 (non-host) switches, independent of BellSouth's completion of the

1 disconnect order. In BellSouth's network, all switch-to-switch call routing
2 instructions are retrieved via an SCP database query by the originating
3 (calling party host) switch. Prior to the conversion, the database query will
4 return an LRN that will continue to route calls to the original end user line on
5 the host BellSouth switch. Following conversion, the SCP database query
6 will return a new LRN that will effectively re-route these incoming intra-
7 switch calls to the new CLEC host switch. Once again, outgoing switch-to-
8 switch calls should not be impacted as part of the normal trigger-based
9 number porting process.

10

11 Under the LNP Average Disconnect Timeliness measure, the importance
12 of triggers and their effect on the LNP process was not recognized, even
13 though such orders typically account for over 90% of LNP orders. Rather,
14 the measure included the interval from BellSouth's receipt of the NPAC
15 "activate" message to the completion of the disconnect order in the host
16 switch, even though, from an end user's perspective, the disconnect activity
17 is meaningless. For trigger orders, it is the activation of the new LRN in
18 BellSouth's network that ultimately determines how quickly the end user is
19 back in full service and able to make and receive calls. Furthermore, the
20 GPSC set a benchmark for this measure – 95% within 15 minutes – that is
21 unobtainable and unnecessary.

22

23 Q. HOW WAS THIS MEASUREMENT ISSUE DEALT WITH IN GEORGIA?

24

25

1 A. Because of the problems with this measure, BellSouth filed a motion with
2 the GPSC requesting that the LNP Average Disconnect Timeliness
3 measure be modified. At its Administrative Session on August 7, 2001,
4 the GPSC granted BellSouth's motion, in part, and directed that BellSouth
5 report results for a modified form of the existing metric, as well as for three
6 new metrics (two directly from the SBC-Texas SQM), beginning with June
7 data. A copy of the GPSC Staff's recommendation that was adopted by
8 the Commission is attached as Exhibit AJV-5. The new measures
9 BellSouth reports are as follows:

10

- 11 • Percent Out of Service < 60 Minutes (SBC-TX PM101)
- 12 • Percentage of Time BellSouth Applies the 10-Digit Trigger Prior to the
- 13 LNP Order Due Date (SBC-TX PM97)
- 14 • LNP Average Disconnect Timeliness (excluding trigger-based orders)

15

16

17 The GPSC is reviewing these new metrics with BellSouth and the CLECs
18 in its ongoing SQM CLEC Workshop and will issue a decision on the
19 appropriate metrics to carry forward. In addition, the Louisiana
20 Commission already ordered BellSouth to report both SBC metrics, but
21 does not provide for the exclusion for trigger-based orders on the LNP
22 Average Disconnect Timeliness metric.

23

24 Q. ARE THERE ANY ISSUES ASSOCIATED WITH THE THREE NEW LNP
25 MEASURES?

1

2 A. Yes. BellSouth has identified coding problems with the measures
3 “Percentage of Time BellSouth Applies the 10-Digit Trigger Prior to the
4 LNP Order Due Date” (P-13B) and “LNP- Average Disconnect Timeliness
5 (excluding trigger- based orders)” (P-13D). These measures are attached
6 as Exhibit AJV-2. Data for P-13B may have slightly overstated or
7 understated BellSouth’s performance until March 2002. BellSouth’s
8 performance was significantly understated by the P-13D measure until
9 March, 2002.

10

11 Q. PLEASE EXPLAIN THE ISSUE WITH FOC AND REJECT RESPONSE
12 COMPLETENESS FOR MULTIPLE RESPONSES.

13

14 A. Beginning with September data, the FOC and Reject Response
15 Completeness (O-11) measurement is included in the parity calculations.
16 The FOC/Reject Response Completeness-Multiple Responses measure is
17 a derivative of the FOC/Reject Completeness Measure. FOC/Reject
18 Completeness measures whether BellSouth returned a FOC, reject or
19 clarification for each CLEC LSR submitted. It is calculated using the
20 number of LSRs receiving a reject or FOC in the reporting period divided
21 by the total number of LSRs submitted during the reporting period. The
22 Multiple Responses measure uses the number of LSRs that received a
23 FOC or reject as the denominator, and the number of LSRs that only
24 received a single FOC or reject as the numerator. In other words, it
25 measures how many LSRs received a single response.

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This measure does not, however, provide an accurate view of the double FOC issue because it includes valid reasons for multiple responses. For example, multiple responses are sent for changed due dates due to pending facilities conditions or updates to FOCs for which information was not available at the time of issuance (circuits IDs etc.). Thus, the information provided by the measure is not meaningful and should not be considered by the Authority.

VII. BELLSOUTH’S DATA COLLECTION AND PERFORMANCE MEASURES REPORTING SYSTEMS

Q. PLEASE DESCRIBE THE PROCESS THROUGH WHICH BELLSOUTH GENERATES ITS MONTHLY SQM REPORTS.

A. The process through which BellSouth generates its monthly SQM reports is extraordinarily complex. The Performance Measurement Analysis Platform (“PMAP”) is the system in which the majority of the SQM and MSS values are produced. Following is a brief overview of the PMAP system (see also Exhibit AJV-6). First, PMAP accumulates source data from the legacy systems and transfers it to the Interexchange Carrier Analysis and Information System (“ICAIS”). These data transfers are initiated and executed by automated scripts.

1 Next, at the end of each month a “snapshot” of the ICAIS data is extracted
2 into the SNAP database. SNAP database is so named because it is a
3 “snapshot” of the data when it is stored. The combination of ICAIS and
4 SNAP constitutes BARNEY. BARNEY is the name of the storage system
5 and is not an acronym. This monthly “snapshot” of data is typically referred
6 to as “early stage data.” SNAP is then copied into PMAP Staging, the
7 database used to store the data that will be analyzed and processed to
8 generate the final SQM and MSS values.

9
10 From PMAP Staging, the data is transferred to the Normalized Operational
11 Data Store (“NODS”), which puts the data into a normalized format. NODS
12 passes the data to the Dimensional Data Store (“DDS”), which
13 summarizes and aggregates the data. The final SQM and MSS reports
14 are generated by queries run against the DDS data. The data from NODS
15 are also used to generate the raw data files made available to the CLECs
16 and utilized by BellSouth to validate the final SQM and MSS reports.

17
18 This process is further described in KPMG’s Final Report on the
19 Supplemental Test Plan at pages VIII-A-1 to VIII-A-3 and was examined
20 and tested by KPMG. See GPSC, KPMG’s BellSouth – Georgia OSS
21 Evaluation Master Test Plan Final Report, BellSouth – Georgia OSS
22 Evaluation Supplemental Test Plan Final Report, BellSouth – Georgia OSS
23 Evaluation Flow-Through Evaluation Final Report and BellSouth – Georgia
24 OSS Evaluation – KPMG Consulting Letter of Professional Opinion,

25

1 Docket 8354-U (Mar. 20, 2001) ("KPMG Final Report") (See Exhibit AJV-
2 7).

3

4 Q. DO CLECS AND REGULATORS HAVE ACCESS TO THE PMAP RAW
5 DATA USED TO CALCULATE PERFORMANCE MEASUREMENTS?

6

7 A. Yes. The bulk of BellSouth's measurements are calculated from the
8 PMAP raw data files. The calculations used to recreate BellSouth's
9 performance results from the raw data are set out in detail in the *PMAP*
10 *Raw Data Users Manual*, which is available to CLECs as well as state and
11 federal regulators. BellSouth is aware of no other ILEC that has provided
12 CLECs with comparable detailed instructions and easy access to raw data
13 to reconstruct performance measures.

14

15 Q. ARE THERE ANY SQM REPORTS THAT ARE CALCULATED USING
16 SYSTEMS OTHER THAN PMAP?

17

18 A. Yes. The nature of several measurements, e.g. OSS Interface Availability
19 and Trunk Group Performance, require that the bulk of the data collection
20 and processing requirements be executed manually, using spreadsheets
21 and other simple database management tools. For these reports, the
22 process owner for each manually produced measurement is responsible
23 for collecting and formatting the legacy system source data that is loaded
24 directly into the PMAP DDS database. The SQM reports are then

25

1 generated by queries run against the DDS data using the same final
2 process step employed for PMAP results reporting.

3

4 Also, data for some measures, e.g. LNP Standalone and xDSL ordering,
5 are calculated directly from the BARNEY system. For these measures, the
6 raw data is placed directly into the PMAP raw data files. The results are
7 calculated in BARNEY and inserted into the PMAP results files.

8

9 Q. IN ORDER TO BETTER UNDERSTAND THE MAGNITUDE OF THE
10 DATA REPORTING PROCESS, WOULD YOU DESCRIBE THE SIZE,
11 MONTHLY REPORTING VOLUMES AND PERSONNEL
12 REQUIREMENTS OF PMAP?

13

14 A. Certainly. PMAP is enormous. In order to have a feel for the size of the
15 PMAP database consider that in March, 2001, 86 million records
16 composing 110 Gigabytes of data had to be transported and processed to
17 produce the SQM data. With full implementation of the Interim SQM and
18 the volume of data being collected and reported has grown substantially.
19 To put this level of activity into perspective, one page of my testimony
20 would require about 2 Kilobytes of storage. PMAP, therefore, processes
21 the equivalent of 55 million pages each month.

22

23 In addition to monthly processing, data must be stored for multiple months
24 in the PMAP database. The current PMAP database is approximately 2.5
25 Terabytes in size (1 billion pages of text documents) or the equivalent of

1 250,000 cases of paper. To put this size into perspective, a 1999 study by
2 Sarnoff Corporation on behalf of the US government estimated the size of
3 the entire Internet in 1999 to be approximately 3 Terabytes.

4 (<http://www.wavexpress.com/faq.html>).

5 In addition to the enormous PMAP system processing 86 million records
6 each month, some measurements are produced manually and some are
7 produced directly from BARNEY. All of these measurement results are
8 available on the PMAP web-site. BellSouth has over 300 people devoted
9 to the production of performance measurements. These resources are
10 required to produce the 2300 sub-metrics in the Interim SQM each month.

11

12

13 DATA AVAILABILITY AND FORMAT

14

15 Q. PLEASE DISCUSS THE AVAILABILITY AND FORMAT OF
16 BELL SOUTH'S PERFORMANCE DATA.

17

18 A. BellSouth's performance data is routinely available to both regulators and
19 CLECs. Each month, BellSouth posts performance measurement reports
20 on its Internet web site: <https://pmap.bellsouth.com>. CLECs can access
21 reports of aggregate data for all CLECs and BellSouth retail units. In
22 addition, individual CLECs can access their own CLEC-specific data via a
23 password that ensures the privacy of the data. As noted above, CLECs
24 can also access the raw data files used to create the performance

25

1 measurement reports, along with a handbook detailing how the
2 measurements are calculated from the raw data files.

3

4 For ease of reference, BellSouth has created the MSS - a user-friendly
5 summary of BellSouth's CLEC aggregate performance data. The MSS
6 depicts the performance results of each sub-metric. This summary is
7 divided into six (6) categories: (A) Resale; (B) Unbundled Network
8 Elements; (C) Local Interconnection Trunking; (D) Operations Support
9 Systems; (E) Collocation, and (F) General. Each category is subdivided
10 into sections, e.g., pre-ordering, ordering, provisioning, maintenance &
11 repair, and billing. Each section is then subdivided into various levels of
12 disaggregation, e.g., product, circuit quantity, need for dispatch, etc., as
13 defined in the Interim SQM.

14

15 Q. WOULD YOU PROVIDE AN EXAMPLE OF HOW THE MSS REPORT
16 CAN BE USED?

17

18 A. Certainly. Suppose the reader wished to find the results for the resale
19 ordering measurement "percent rejected service requests" for residence
20 local service requests ("LSRs") submitted electronically in Tennessee for
21 CLECs. On the first page of the MSS, the example would be reflected as:
22 (A) Resale; (1) Ordering; (1) % Rejected Service Requests; (1) Residence,
23 or A.1.1.1. The results representing this measurement will be at location
24 A.1.1.1 in the MSS. The data included at each location will show the SQM
25 reference and title, approved benchmark or analogue, and actual results for

1 CLECs. Where a retail analogue applies, results for BellSouth retail
2 performance appear along with the standard deviation, standard error, and
3 statistical modified-Z score.

4

5 Q. HOW DOES THE MSS COMPARE TO THE DATA POSTED TO THE
6 PMAP WEBSITE?

7

8 A. The MSS is produced from the same data and systems and based on the
9 same SQM that produce the data posted to the PMAP website. In some
10 cases the product level website data differs from the MSS. The large
11 product groupings will be identical, however some of the low volume
12 products may be reflected in different groupings between the systems. In
13 many cases, the website data will have the same product appearing
14 separately as well as part of a larger grouping. The MSS will only reflect
15 each product once in these cases. For example, Business includes ISDN
16 in the website data and ISDN also appears separately. In the MSS, ISDN
17 would only appear once, as the standalone ISDN category. The MSS
18 reports also appear on the PMAP website.

19

20 STATISTICAL TESTING

21

22 Q. HOW ARE THE STATISTICAL TESTING RESULTS ACCOMPLISHED
23 FOR MSS REPORTING PURPOSES?

24

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1 A. The MSS applies the modified-Z statistical methodology to those
2 measures that are compared against a retail analogue. The modified-Z
3 statistical methodology is a standard statistical hypothesis test that
4 incorporates into the methodology the actual differences in BellSouth's
5 performance between its retail and wholesale functions/activities, and the
6 amount of variation in the underlying data being assessed. In the *Bell*
7 *Atlantic – New York Order*, the FCC held that the modified Z-test used by
8 Verizon for comparing performance measurements was an appropriate
9 statistical methodology. See Order, *In the Matter of Application of Bell*
10 *Atlantic New York for Authorization Under Section 271 of the*
11 *Communications Act To Provide In-region, InterLATA Service in the*
12 *State of New York*, CC Docket 99-295, Appendix B (Dec. 22, 1999) (“*Bell*
13 *Atlantic-New York Order*”). This conclusion was affirmed based on the use
14 of the modified Z-test by Southwestern Bell –Texas to offset the effect of
15 random variation within individual measurements in the *Texas 271*
16 decision.

17
18 For performance reporting purposes, BellSouth uses the same modified Z-
19 test as Verizon and SBC to determine the material significance of
20 variations between services provided by BellSouth to CLECs and services
21 to its own retail units. This statistical methodology was advocated by the
22 Local Competition Users Group (“LCUG”), supported by some intervenors
23 in this docket and labeled the modified Z score. A score of below –1.645
24 provides a 95% confidence level that the variables are different, or that they

25

1 come from different processes. This is the standard by which a yes or no
2 parity indication is determined for the MSS.

3

4 Q. DOES BELL SOUTH USE THE SAME STATISTICAL METHODOLOGY IN
5 CALCULATING PENALTIES?

6

7 A. No. For calculating penalties a new statistical test was developed in the
8 Louisiana workshops collaboratively between BellSouth and the CLECs.
9 While the modified-Z test is used in a subpart of the penalty calculation
10 process, the truncated-Z method is used to determine compliance for
11 penalty purposes.

12

13 Q. WHY IS A DIFFERENT METHOD FROM THE ONE USED FOR
14 PERFORMANCE REPORTING PURPOSES NEEDED FOR USE IN
15 CALCULATING PENALTIES?

16

17 A. The Modified Z-test is relatively simple to apply and is therefore well suited
18 for performance monitoring and reporting, i.e., flagging possible problems
19 on an aggregate level. However, the methodology used for calculating
20 penalties should include additional safeguards designed to assure that
21 performance results are not improperly identified as discriminatory, when
22 in fact equity exists. These safeguards are especially needed when
23 performance results are viewed on a disaggregated level, e.g., at the
24 individual CLEC level, as opposed to state level results.

25

1 As CLEC activity volumes grow, the discreet comparisons based on
2 product and/or activity type become more analogous between ILECs and
3 CLECs. While the modified-Z methodology works well in this environment,
4 i.e., when the ILEC and CLEC activity universes are closer together in
5 product and/or activity mix and volume, the modified-Z test is inadequate
6 where activity volumes are low. It does not balance the likelihood of errors
7 occurring that adversely affect either BellSouth or the CLECs. Therefore,
8 the modified-Z methodology is inappropriate for use as the sole basis of
9 calculating penalties.

10

11

12 Q. WHAT STATISTICAL METHODOLOGY DOES BELL SOUTH BELIEVE IS
13 MORE APPROPRIATE FOR USE IN CALCULATING PENALTY
14 PAYMENTS?

15

16 A. BellSouth believes that the appropriate methodology to adopt for purposes
17 of calculating penalties is the Truncated Z method with error probability
18 balancing. Dr. Colin Mallows, a recently retired statistician from AT&T
19 Research Labs, created the Truncated Z statistic. Dr. Mallows, together
20 with Ernst & Young statisticians, developed the actual Truncated Z
21 methodology by adding to the statistic such things as error probability
22 balancing. This collaborative effort was the result of a request by the
23 Louisiana Public Service Commission (LPSC) that lasted over nine
24 months, and concluded in the filing of a "Statisticians' Report" with the

25

1 LPSC in September of 1999 (revised February 2000). This method is
2 used in all penalty plans currently operating for BellSouth.

3

4 Q. WHY IS THE TRUNCATED-Z STATISTIC APPROPRIATE FOR
5 ASSESSING PENALTIES?

6

7 A. The Truncated-Z statistic is appropriate when assessing penalties
8 because it assures that like-to-like comparisons are made. This feature is
9 not always present in the modified-Z test. Also, by using error probability
10 balancing in the Truncated-Z methodology, parameters are included that
11 allow for the application of a materiality test to the statistical results. The
12 materiality test addresses the question of whether a statistically significant
13 difference is in fact a material difference. This additional consideration is
14 necessary to prevent the erroneous identification of observed differences
15 as discriminatory, when in fact there is no appreciable impact on local
16 competition. Importantly, the Truncated-Z methodology follows four key
17 principles:

- 18 ▪ Like-to-Like Comparisons – When possible, data should be compared
19 at appropriate levels that facilitate apples to apples comparison; for
20 example, CLEC transactions that are “new” provisioning orders should
21 be compared with “new” BellSouth provisioning orders.
- 22 ▪ Aggregate Level Test Statistic – Each performance measure of interest
23 should be summarized by one overall test statistic giving the decision
24 maker a rule that determines whether a statistically significant
25 difference exists.

- 1 ▪ Product Mode Process – The statistical processes must be developed
2 so that it can be placed in production efficiently without the need for
3 manual intervention.
- 4 ▪ Balancing – The testing methodology should balance Type I and Type II
5 error probabilities. A Type I error adversely affects BellSouth; a Type II
6 error adversely affects a CLEC. Balancing the error probabilities
7 ensures that both sides assume the same level of uncertainty in the
8 decision process.

9
10 For the reasons discussed, BellSouth believes that the Truncated Z
11 statistic should be adopted for purposes of calculating penalties when
12 comparing ILEC and CLEC performance levels.

13
14 DATA VALIDATION

15
16 Q. PLEASE DESCRIBE THE SAFEGUARDS IN PLACE TO TEST THE
17 RELIABILITY OF PERFORMANCE DATA.

18
19 A. BellSouth's performance data undergo extensive validation processes,
20 prior to being publicly posted, to ensure the accuracy and reliability of the
21 data that BellSouth makes available to the CLECs. First, BellSouth's
22 systems have internal quality assurance controls. Second, BellSouth has
23 implemented manual data validation checks within and between data
24 processes. These checks take place for both BellSouth data and CLEC
25 data. Third, BellSouth has undergone stringent third party audits in

1 Georgia, which will be discussed in detail later in this testimony. These
2 audits have confirmed that the data are accurate. Finally, the TRA, in
3 conjunction with the third party auditors, will monitor and audit BellSouth's
4 Performance Measurement Analysis Platform (PMAP) reports annually for
5 the next four years.

6
7 BellSouth's data collection systems perform the first layer of internal
8 validation. To facilitate the TRA's understanding of BellSouth's data flow,
9 attached is a diagram of BellSouth's data production process, including
10 the production of the MSS and 271 Charts. See Exhibit AJV-6. BellSouth's
11 systems also execute a number of data validation checks to ensure the
12 integrity of the data between databases, from the legacy systems to PMAP
13 staging of raw data. As an example, the process for transferring data
14 between the legacy systems and the performance reporting system
15 includes a number of records checking routines to ensure that valid records
16 are not being lost.

17

18 Q. HOW IS MANUAL VALIDATION DONE?

19

20 A. BellSouth's Data Analysts perform a second layer of validation. These
21 validation processes fall into two main categories - code validation and
22 business validation. In the first process, the data production team analyzes
23 and validates the computer code used in computing the measures. The
24 data production team validates the computer programming to ensure the
25 data are produced in accordance with the code. This team performs

1 reasonableness checks on the data. For example, they may review data
2 for the current month compared to the previous month to ascertain if
3 volume changes are reasonable from a business standpoint. Another
4 function of the data analysis team is to ensure that Service Quality
5 Measurement (SQM) Definitions, Business Rules, and Exclusions are
6 applied accurately to the data. Similarly, experts in the field (e.g. Network
7 Operations, Local Carrier Service Center (LCSC)) review the performance
8 results to validate that the results are reasonable.

9

10 Q. WHAT ADDITIONAL INDICIA OF DATA RELIABILITY EXIST?

11

12 A. BellSouth's data currently are subject to, and will continue to be subject to,
13 independent third party audits. BellSouth's data have already undergone
14 more extensive scrutiny than the FCC found sufficient in approving
15 applications by other RBOCs. For example, in Texas, despite CLECs
16 criticism of SWBT's data, the FCC held that "[w]e reject the contention that
17 SWBT's data are generally invalid because they have not been audited,
18 and thus cannot be relied upon to support its application." *SWBT-Texas*
19 *Order* ¶57. Rather than require an audit of every measure, the FCC found
20 that SWBT's data "have been subject to scrutiny and review by interested
21 parties," and that such scrutiny ensured that the data were reliable. *Id.* The
22 scope of the audits conducted in Georgia to date and the extensive
23 opportunities for CLEC comments easily satisfy the standard adopted by
24 the Commission in its *SWBT-Texas Order*.

25

1 In addition to the third-party audits conducted to date, BellSouth provides
2 competing carriers with access to their own CLEC-specific data every
3 month. CLECs have used that information to provide comments to the
4 State Commissions and the FCC. The FCC has held that the provision of
5 CLEC-specific data acts as an additional check on the accuracy of the
6 data. *SWBT-KS/OK Order* ¶278.

7
8 Furthermore, BellSouth's Interim SQM provides for third party audits of its
9 PMAP reports annually for at least the next four years under the auspices of
10 the relevant state commissions or this Authority.

11
12 Additionally, the GPSC established a process three years ago pursuant to
13 which CLECs may bring data integrity issues to its attention. Significantly,
14 no CLEC has availed itself of this process.

15
16 Finally, BellSouth has a group of employees designated to respond to
17 CLEC inquiries about BellSouth performance data. The CLEC Interface
18 Group serves as a primary point of contact for all CLEC questions on
19 PMAP. The CLEC Interface Group uses CLEC inquiries as an on-going
20 check on the reliability of the data.

21
22 In conclusion, the extensive safeguards that are in place, both internal and
23 external, will ensure that BellSouth's performance data will remain
24 consistently meaningful and reliable. In its STP Final Report, KPMG
25 confirmed that BellSouth's validation processes are adequate and

1 complete. See *STP Final Report* (“KPMG Final Report” Exhibit AJV-7),
2 VIII-D-70-71; VIII-A-18-21 (“BellSouth has established and documented
3 procedures to collect data mechanically for its PMAP SQMs at pre-
4 determined times. These include checks to verify the data....”).

5

6

7

8 **VIII. THIRD PARTY AUDIT OF BELL SOUTH’S PERFORMANCE METRICS**

9

10 INTRODUCTION

11

12 Q. PLEASE EXPLAIN WHAT HAS BEEN AUDITED IN GEORGIA.

13

14 A. As the TRA is aware, KPMG has performed extensive third party audits on
15 BellSouth’s performance metrics in Georgia. The scope and status of
16 each of the three audits are described in detail below.

17

18 Q. EXPLAIN WHAT KPMG HAS FILED IN REGARDS TO THE GEORGIA
19 AUDITS.

20

21 A. On February 28, 2002, KPMG filed a comprehensive Revised Interim
22 Status Report with the GPSC setting forth the status of its three metrics
23 audits in Georgia. A copy of this report is attached as Exhibit AJV-8. This
24 report provides KPMG’s explanation of the status of each of the three
25 audits. My testimony summarizes this important report. I also will explain

1 why the audit results to date conclusively establish the reliability of
2 BellSouth's performance data.

3

4 The Revised Interim Status Report describes each test target, the metrics
5 tested, a progress report for "ongoing" test segments, and any open issues
6 or exceptions. In addition, KPMG provided to the GPSC several
7 subtending logs and spreadsheets describing the status of the various
8 evaluation criteria tested in each of the three audits. These attachments
9 provide further detail, sometimes at the submetric or individual chart level,
10 regarding KPMG's findings to date. Additionally, the letter from Bennett
11 Ross to the GPSC on March 22, 2002, attached as Exhibit AJV-9,
12 provides further updates to certain test segments since the KPMG Revised
13 Interim Status Report.

14

15 SCOPE AND STATUS OF AUDIT I

16

17 Q. PLEASE DESCRIBE THE SCOPE OF GEORGIA AUDIT I.

18

19 A. The parameters of Georgia Audit I are contained in the KPMG Master and
20 Supplemental Test Plans. Georgia Audit I was designed to accomplish
21 three things: (1) determine BellSouth's compliance with the metrics
22 originally ordered by the GPSC; (2) validate the accuracy of the reported
23 performance results; and (3) evaluate BellSouth's metrics-related systems
24 and processes. KPMG tested these areas against the original May 6,
25 1998 GPSC metrics Order in Docket No. 7892-U.

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Specifically, KPMG tested the following four “targets” in conjunction with the MTP audit:

PRE-2: Pre-Ordering Performance Measures Evaluation

PRE-2 involved the calculation and reporting validation for the two Georgia-ordered metrics associated with the pre-ordering process, *Average OSS Response Interval* and *OSS Interface Availability*. Specifically, KPMG evaluated: 1) whether BellSouth correctly disaggregated its results reports in accordance with the May 2000 SQM, and 2) whether KPMG could match the BellSouth-reported results for each level of disaggregation using legacy source system data.

O&P-7: Ordering & Provisioning Performance Measures Evaluation

O&P-7 involved the calculation and reporting validation and test CLEC data comparison for the thirteen Georgia-ordered metrics associated with ordering and provisioning processes. Specifically, KPMG evaluated: 1) whether BellSouth correctly disaggregated its results reports in accordance with the May 2000 SQM, 2) whether KPMG could match the BellSouth-reported results for each level of disaggregation using legacy source system data, and 3) whether the test transactions initiated by KPMG’s CLEC were present in BellSouth’s raw data files.

M&R-7: Maintenance & Repair Performance Measures Evaluation

1 M&R-7 involved the calculation and reporting validation and test CLEC
2 data comparison for the eight Georgia-ordered metrics associated with the
3 maintenance and repair process. Specifically, KPMG evaluated 1)
4 whether BellSouth correctly disaggregated its results reports in
5 accordance with the May 2000 SQM, 2) whether KPMG could match the
6 BellSouth-reported results for each level of disaggregation using legacy
7 source system data, and 3) whether the test transactions initiated by
8 KPMG's CLEC were present in BellSouth's raw data files (applicable for
9 five of eight metrics).

10

11 ***BLG-4: Billing Performance Measures Evaluation***

12 BLG-4 involved the calculation and reporting validation and test CLEC
13 data comparison for the six Georgia-ordered metrics associated with the
14 billing process. Specifically, KPMG evaluated 1) whether BellSouth
15 correctly disaggregated its results reports in accordance with the May
16 2000 SQM, 2) whether KPMG could match the BellSouth-reported results
17 for each level of disaggregation using legacy source system data, and 3)
18 whether the test transactions initiated by KPMG's CLEC were present in
19 BellSouth's raw data files (applicable to four of six metrics).

20

21 Q. WHAT ADDITIONAL TESTING WAS INCLUDED IN AUDIT I?

22

23 A. After the MTP, Audit I was expanded via the Supplemental Test Plan (STP)
24 to include additional metrics. The test plan was also revised to include six
25 Performance Metrics Review (PMR) test segments outlined in the STP,

1 five of which are relevant to data reliability (PMR1 - PMR5). KPMG
2 designed the PMR1 - PMR5 components of the audit to test important
3 “quantitative and qualitative aspects” of BellSouth’s performance metrics
4 data and processes as set forth in Mr. Lawrence E. Strickling’s letter,
5 dated September 27, 1999, from the FCC’s Common Carrier Bureau to
6 US West. Together, these test segments provide an extremely
7 comprehensive review of BellSouth’s performance reporting and data.
8 Specifically, KPMG tested the following aspects of measurement
9 production in the STP metrics audit:

10
11 ***PMR-1: Data Collection and Storage Verification and Validation***
12 ***Review***

13 PMR-1 evaluated the adequacy, completeness, and scalability of
14 BellSouth’s data collection and storage systems/tools, processes, and
15 documentation across all Georgia-ordered metrics. This review of
16 BellSouth’s reporting infrastructure addressed retail and wholesale data
17 flows, mechanized and manual processes, data backup and disaster
18 recovery procedures, data retention policies for each system in the data
19 flow (legacy source to PMAP), capacity monitoring, planning, and
20 augmentation processes, and data security and access procedures.

21
22 ***PMR-2: Metrics Definition Documentation and Implementation***
23 ***Verification and Validation Review***

24 PMR-2 evaluated the adequacy, completeness, and accuracy with which
25 BellSouth documented and implemented 43 of the Georgia-ordered

1 metrics. This review of BellSouth's SQM documentation and computation
2 instructions addressed retail, wholesale, mechanized, and manual reports,
3 the data exclusions and business rules applied in the creation of raw data,
4 and the data exclusions, business rules and logic applied in the calculation
5 of the metrics results. KPMG executed three stages of analysis for each
6 metric: 1) a detailed review of the October 1999 SQM documentation (and
7 any changes made in the February 2000 SQM) against the Georgia order,
8 2) a comparison of the SQM documentation to BellSouth's computation
9 instructions (typically published in the Raw Data User's Manual), and 3) a
10 detailed review of the raw data creation process to determine if the
11 exclusions were properly applied (required only when discrepancies were
12 identified in step two).

13
14 ***PMR-3: Metrics Change Management Verification and Validation***
15 ***Review***

16 PMR-3 evaluated the adequacy, completeness, and implementation
17 timeliness of BellSouth's metrics production and reporting change
18 management processes across all Georgia-ordered metrics. This review
19 addressed the end-to-end process required to identify, track, develop,
20 implement, and communicate changes to metrics standards and
21 definitions, source system feeds, internal business/operations processes,
22 raw data, levels of disaggregation, and user documentation.

23
24 ***PMR-4: Metrics Data Integrity Verification and Validation Review***
25

1 PMR-4 evaluated the accuracy and completeness of BellSouth's data
2 migration and transformation processes to ensure that data are not lost or
3 corrupted during the transfer and processing of transaction records
4 between the legacy source systems (early stage data) and the creation of
5 raw data. In order to validate the *accuracy* of BellSouth's raw data, KPMG
6 identified the "key fields" in the raw data for the SQMs in each process
7 domain, drew a random sample of values for each key field in the raw data,
8 and compared those values to the corresponding values found in
9 BellSouth's early stage data. In order to determine the *completeness* of
10 the raw data, KPMG extracted a large block of consecutive records from
11 BellSouth's early stage data and determined whether all of the records
12 were accounted for in the raw data files. KPMG executed these tests
13 across 42 of the Georgia-ordered metrics.

14

15 ***PMR-5: Metrics Calculation and Reporting Verification and***
16 ***Validation Review***

17 PMR-5 evaluated the accuracy and completeness of BellSouth's CLEC
18 aggregate and retail SQM report production processes across 36 of the
19 Georgia-ordered metrics. Specifically, KPMG reviewed whether BellSouth
20 provided report values for every level of disaggregation as documented in
21 the May 2000 Georgia SQM, and whether KPMG could recalculate, for an
22 exact match, the reported results for the CLEC aggregate and retail
23 analogs (at each level of disaggregation) using the raw data files and
24 computation instructions provided by BellSouth.

25

1 Q. PLEASE DESCRIBE THE CURRENT STATUS AND RESULTS OF
2 GEORGIA AUDIT I.

3

4 A. In Audit I, KPMG evaluated 420 evaluation criteria and BellSouth has
5 satisfied 415 of those criteria. The remaining 5 evaluation criteria are
6 associated with two open exceptions. The status of Audit I, and the open
7 exceptions, can be summarized as follows:

8

9 PRE-2; O&P-7; M&R-7; BLG-4

10 Since the KPMG Interim Status Report, Exception #136/137 has moved to
11 the closure process, and these evaluation criteria are all closed as
12 “satisfied” (See Exhibit AJV-10, KPMG – CLEC Status Meeting Minutes
13 April 3, 2002). Exception #136/137 had three evaluation criteria, which
14 have all closed: O&P-7-1-3, O&P-7-2-3, and O&P-7-3-3 (BellSouth Master
15 Test Plan – Final Report O&P-7-1-3, O&P-7-2-3, and O&P-7-3-3, pg. V-G-
16 57, V-G-60, and V-G-62). Exception #86.1 had one evaluation criteria,
17 PMR-5-11-2, which has closed (BellSouth Supplemental Test Plan – Final
18 Report PMR-5-11-2, pg. VII-E-38). These reports are attached as Exhibit
19 AJV-7, “KPMG Final Report.”

20

21 PMR-1: Data Collection and Storage

22 These evaluation criteria are all closed as “satisfied.”

23

24 PMR-2: Definition Documentation & Implementation

25

1 These evaluation criteria are all closed as “satisfied” with the exception of
2 Exception #122. Exception #122 relates to the movement of the
3 timestamps from the legacy systems to the interface gateways for FOC
4 Timeliness and Reject Interval. While this effort is not complete, BellSouth
5 has confirmed through analysis that the impact on reported data of those
6 instances where timestamps have not been moved is minimal. On
7 average, 95% of the time, the impact of a missing outbound timestamp in
8 TAG is 0.8 seconds, and of a missing outbound timestamp in EDI is less
9 than 3 minutes. These differences do not substantially affect the reliability
10 of BellSouth’s reported data.

11

12 PMR-3: Metrics Change Management

13 These evaluation criteria are all closed as “satisfied.”

14

15 PMR-4: Data Integrity

16 These evaluation criteria are all closed as “satisfied,” with the exception of
17 Exception #89.3. Exception #89.3 relates to the OSS Response Interval
18 Metric. KPMG originally identified issues in connection with the exclusion
19 of negative response intervals in the raw data for LENS, TAG, ROS, and
20 RNS reports. These issues were minor (for example, the LENS records
21 accounted for between 0.002% and 0.066% of total records at the
22 submetric level and yielded a difference of between 0.1 msec and 10.62
23 msec to daily average response intervals) and BellSouth addressed the
24 problem by implementing new code in the source systems between April
25 and July 2001. KPMG successfully retested the LENS early-stage data for

1 April 2001 and the ROS early-stage data for September 2001. Also,
2 KPMG has successfully replicated RNS early stage data for September
3 2001. As a result of KPMG retest activities, BellSouth identified a minor
4 issue in TAG associated with the identifier that relates incoming
5 transactions with outgoing transactions. Again, this defect is relatively
6 minor, causing BellSouth to drop 0.24% of the total pre-order transactions
7 from the January 2002 results calculations. BellSouth implemented a TAG
8 fix for this defect on February 9, 2002. These coding issues have no
9 material impact on the results reported via the MSS.

10

11 PMR-5: Data Replication

12 These evaluation criteria are all closed as “satisfied.”

13

14 SCOPE AND STATUS OF AUDIT II

15

16 Q. WHY WAS AUDIT II INSTITUTED IN GEORGIA?

17

18 A. On June 6, 2000, the GPSC adopted additional metrics and revised some
19 standards for purposes of the KPMG third party OSS test. The GPSC
20 ordered KPMG to conduct a comprehensive review of these revised
21 measures. In order to leverage the testing performed during Audit I, KPMG
22 examined BellSouth’s SQM documentation to identify the incremental “test
23 targets” introduced by the June 6, 2000 Order, including new metrics and
24 existing metrics with new or modified levels of disaggregation, analogs,

25

1 benchmarks, business rules, data exclusions, report production
2 processes/systems, or legacy source data feeds.

3

4 KPMG did not retest metrics or submetrics that it had reviewed in Audit I,
5 as long as BellSouth had made no modifications to any of these
6 components. In addition, the GPSC specifically requested that KPMG
7 validate BellSouth's newly developed graphical results reports ("271
8 charts") for consistency against published metrics definitions and accuracy
9 of results replication against raw data. The most recent months' data on
10 the 271 charts are the same data that appears in the MSS.

11

12 Q. WHY DID BELL SOUTH DEVELOP THE "271 CHARTS" IN ADDITION TO
13 THE SQM REPORTS?

14

15 A. BellSouth developed the 271 charts in order to provide up to a full year of
16 submetric results on a single page, a format more useful to state and
17 federal commissions in their review of BellSouth's performance than the
18 existing SQM reports. Beginning in March 2001, the latest monthly results
19 as reflected on 271 charts were integrated into the MSS for a consolidated
20 view of BellSouth's monthly performance across all metrics and
21 submetrics. Both the 271 charts and the MSS are produced from the
22 same basic production processes and reporting platform tested during
23 Audit I.

24

25 Q. PLEASE DESCRIBE THE SCOPE OF GEORGIA AUDIT II.

1
2 A. Pursuant to the instructions of the GPSC and as with Audit I, KPMG
3 designed Audit II in accordance with Mr. Strickling's letter to US West.
4 Consequently, KPMG executed the same comprehensive test processes
5 defined in Audit I to validate the accuracy and completeness of BellSouth's
6 performance metrics in Audit II. The Test format of Audit II applied the
7 same PMR-1 through PMR-5 tests described under Audit I to the
8 measures tested in Audit II. The differences in scope between Audit I and
9 Audit II, which consist mainly of replicating the 271 charts and additional
10 metrics and submetrics that were evaluated, are set forth below:

11

12 ***PMR-1: Data Collection and Storage Verification and Validation***
13 ***Review***

14 KPMG determined that Audit I test results would apply (no Audit II retest
15 required) for all existing metrics, including those for which new levels of
16 disaggregation were added, as long as the information flows and data
17 collection and storage processes were not modified for existing metrics
18 and those implemented to support any new submetrics were the same as
19 those tested for the corresponding metric during Audit I. As a result,
20 KPMG tested the following five metrics against PMR-1 evaluation criteria
21 in Audit II:

- 22 ■ *Service Inquiry with Firm Order Timeliness*
- 23 ■ *Average Response Time for Loop Makeup Information*
- 24 ■ *% Hot Cut Provisioning Troubles w/in 7 Days*
- 25 ■ *% Change Management Notices Sent On Time*

- 1 ▪ *Average Change Management Notices Delay Days*

2

3 ***PMR-2: Metrics Definition Documentation and Implementation***

4 ***Verification and Validation Review***

5 KPMG determined that no further Audit II activity was required to validate
6 the 24 (Per KPMG Revised Interim Status Report, attached as Exhibit
7 AJV-8) metrics tested during Audit I where no new levels of disaggregation
8 were introduced and no modifications were made to the business rules,
9 data exclusions, or raw data format (as reflected in BellSouth's
10 computation instructions). As a result, KPMG tested the 27 measurements
11 listed in the Interim Status Report against PMR-2 evaluation criteria during
12 Audit II.

13

14 ***PMR-3: Metrics Change Management Verification and Validation***

15 ***Review***

16 KPMG determined that BellSouth's metrics change management
17 processes and technology support infrastructure had not been modified
18 since the completion of the Audit I, PMR-3 evaluation. As a result, KPMG
19 decided not to retest this area during Audit II and allowed the Audit I test
20 results to stand as satisfied.

21

22 ***PMR-4: Metrics Data Integrity Verification and Validation Review***

23 KPMG determined that no further Audit II activity was required to validate
24 the 24 metrics tested during Audit I where no new levels of disaggregation
25 were introduced and no modifications were made to the legacy source

1 system data feeds or raw data. As a result, KPMG tested 25 new or
2 modified metrics against the PMR-4 evaluation criteria during Audit II.

3

4 ***PMR-5: Metrics Calculation and Reporting Verification and***
5 ***Validation Review***

6 Since the GPSC specifically directed KPMG to test BellSouth's 271 charts
7 in this test segment, KPMG did not rely on any of the Audit I replication
8 results for this test and evaluated a total of 51 metrics and 1,178 charts
9 against the criteria established for PMR-5.

10

11 ***PMR-6: Statistical Analysis Assessment***

12 This test segment evaluated the processes and statistical methods, i.e.,
13 modified-z methodology, employed by BellSouth to evaluate the level of
14 service BellSouth offers to CLECs relative to the level of service BellSouth
15 provides retail customers. The primary objective was to assess the
16 accuracy and validity of these statistical methods in determining parity.

17

18 The combination of Phase I and Phase II covers all measures up to those
19 implemented per the GPSC June 6, 2000 Order. It also repeats some of
20 the testing conducted in Phase I.

21

22 Q. PLEASE DESCRIBE THE CURRENT STATUS AND RESULTS OF
23 GEORGIA AUDIT II.

24

25 A. Audit II is closed with all evaluation criteria satisfied.

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SCOPE AND STATUS OF AUDIT III

Q. PLEASE DESCRIBE THE SCOPE OF GEORGIA AUDIT III.

A. The GPSC opened Audit III to test the measures adopted by the GPSC on January 16, 2001, in Docket No. 7892-U. To determine the scope of Audit III, KPMG re-examined all of the existing measures and submetrics and determined those that needed to be audited. Specifically, KPMG is auditing any new measures (including measures with changes in business rules and/or implementation) and additional levels of disaggregation implemented in Georgia since the June 6, 2000 Order. KPMG also is auditing the SEEM plan.

KPMG executed the same basic test processes for PMR-1 through PMR-5 defined in Audit I and Audit II to validate the accuracy and completeness of BellSouth's performance metrics in Audit III. In PMR-1 and PMR-3, KPMG is re-verifying information collected in earlier Audits. In PMR-2, PMR-4, and PMR-5, KPMG is testing new measures or new levels of disaggregation:

PMR-1: Data Collection and Storage Verification and Validation

1 KPMG is retesting PMR-1 by requesting re-verification of documentation
2 and interview summaries to confirm that the information is still applicable to
3 BellSouth's practices. KPMG will review three months of data.

4
5 ***PMR-2: Metrics Definition Documentation and Implementation***
6 ***Verification and Validation Review Test***

7 KPMG continues to evaluate metrics definitions and standards
8 documentation, as well as the related policies and practices, through a
9 review of the BellSouth's SQM, Georgia Performance Metrics and
10 BellSouth's PMAP Reports. KPMG examines the SQM to verify that the
11 measurements accurately reflect BellSouth's SQM reporting. KPMG also
12 is verifying that the PMAP reports are complete and consistent with the
13 guidelines, and that the reports are available in a timely and consistent
14 manner.

15
16 ***PMR-3: Metrics Change Management Verification and Validation***

17 KPMG is retesting Audit I PMR-3 from the STP by re-verifying
18 documentation and interview summaries to confirm that such information is
19 still applicable and correct.

20
21 ***PMR-4: Metrics Data Integrity Verification and Validation Review***

22 The analysis process of this test segment includes a comparison of data
23 from the Legacy/Source systems to the data captured in the Barney
24 Snapshot tables, and a comparison of the Barney Snapshot tables to the
25 PMAP Staging Tables. KPMG applies the defined business rules to the

1 PMAP Staging tables and compares the results to the NODS Reporting
2 Tables.

3

4 ***PMR-5: Metrics Calculation and Reporting Verification and***
5 ***Validation Review – SQM Reports***

6 Like Audit I and Audit II, the purpose of this test segment is to assess the
7 accuracy and completeness of reported performance measure
8 disaggregation levels, and determine whether there is agreement between
9 KPMG-calculated and BellSouth-reported SQM values. The replication of
10 the SQM reports is a three-step process. First, the SQMs are calculated
11 using the raw data provided by BellSouth. Second, KPMG compares the
12 calculated values to the values reported by BellSouth. Third, the levels of
13 product disaggregation BellSouth reported is compared to those it listed in
14 its SQM plan. KPMG reviews three months of data.

15

16 ***PMR-5: Metrics Calculation and Reporting Verification and Validation***
17 ***Review – 271 Charts***

18 In this test segment, KPMG calculates the SQM values using BellSouth raw
19 data and compares the KPMG-calculated values to the SQM values
20 depicted on the graphical charts. KPMG reviews three months of data.

21

22 Q. PLEASE DESCRIBE THE CURRENT STATUS AND RESULTS OF
23 GEORGIA AUDIT III.

24

25

1 A. Effectively, Audit III is now largely complete for most of the test segments.

2 As of April 5, 2002, the status of Audit III by test segment is as follows:

3

4 ***PMR-1 (Data Collection and Storage) is 90% complete (See Exhibit***
5 ***AJV-8, KPMG Revised Interim Status Report).*** The unfinished activities
6 are focused on the verification of BellSouth's capacity and capacity
7 planning processes. KPMG has completed the analysis and testing for all
8 other Audit III PMR-1 evaluation criteria with "satisfied" results.

9

10 ***PMR-2 (Standards and Definitions) is 100% complete for Month I,***
11 ***100% complete for Month II, and 95% complete (3 measures in***
12 ***progress) for Month III (See Exhibit AJV-9, Letter of Bennett Ross to***
13 ***GPSC).*** The three measures that are still in progress for Month III are
14 Reject Interval, FOC Timeliness, and Service Order Accuracy. These
15 measures are being retested per BellSouth's request.

16

17 ***PMR-3 (Change Management) is 85% complete (See Exhibit AJV-8,***
18 ***KPMG Revised Interim Status Report).*** The remaining activity will be
19 focused on the monitoring, retest and resolution of three draft exceptions.
20 None of the three change management draft exceptions impact BellSouth's
21 reported performance data or the reliability of the results upon which
22 BellSouth has asked the Authority to rely. Rather, they relate to the process
23 by which BellSouth manages changes to its metrics. The two open draft
24 exceptions are discussed fully in Exhibit AJV-11.

25

1 **PMR-4 (Data Integrity) is 27% (See Exhibit AJV-8, KPMG Revised**
2 **Interim Status Report).** The 27% complete figure for PMR-4 is based on
3 the number of completed measures in Audit III, and does not include the
4 measures completed in Audits I and II. When the completed Audit I and II
5 measures are included, the percent complete is 54% as referenced in the
6 KPMG Revised Interim Status Report, Exhibit AJV-8. KPMG has issued
7 the following exceptions and draft exceptions that are currently open, none
8 of which has a material impact on any of BellSouth's performance
9 measurements. For detailed information on each of the Georgia Open and
10 Closed exceptions please refer to Exhibit AJV-11.

- 11
- 12 ▪ Exception #145 (Draft Exception 186)- FOC/Reject Response
- 13 Completeness.
- 14 ▪ Exception #147 (Draft Exception 188) – Average Completion Notice
- 15 Interval.
- 16 ▪ Draft Exception #196 - Percent Rejected Service Requests.
- 17

18 **PMR-5 (Data Replication) is 84% complete for SQM Reports and 67%**
19 **complete for 271 Charts (See Exhibit AJV-9, Letter of Bennett Ross**
20 **to GPSC).** For Audit III, KPMG is testing three months of data in both the
21 SQM reports and 271 charts for 60 new or modified metrics. KPMG is not
22 retesting the 14 metrics previously reviewed during Audits I/II since the
23 levels of disaggregation, business rules, and calculation methodologies
24 remain unchanged. KPMG has issued eleven exceptions or draft
25 exceptions in connection with the Audit III replication testing accomplished

1 to date, none of which has a material impact on BellSouth's reported data,
2 and only four of which are currently open exceptions. All of the exceptions
3 are address fully in Exhibit AJV-11.

- 4 ▪ Exception #142 (DE #184) – Average Jeopardy Notice Interval.
- 5 ▪ Exception #144 (DE #179) - % Completions/Attempts w/o Notice or
6 <24 Hours Notice.
- 7 ▪ Exception #148 (DE#191) LNP- Reject Interval.
- 8 ▪ Draft Exception #195 – Maintenance Average Duration.

9
10 Q. WHAT CRITERIA IS KPMG USING TO EVALUATE THE PMR-5 TEST
11 SEGMENT IN GEORGIA AUDIT III?

12
13 A. KPMG maintains an issues log for PMR-5 that documents its outstanding
14 replication issues. KPMG has three categories in PMR-5 – “match (“M”);”
15 “non-material match (“NMM”);” and “non-match (“NM”).” A match is self-
16 explanatory. KPMG defines a NMM as “a non-match that is a difference of
17 less than 1% of the total volume of transactions of either the numerator or
18 denominator.” A NM is a discrepancy that, if left unremedied, would result
19 in a “not satisfactory” rating at the conclusion of the audit.

20
21 It also is important to note that there are two classes of non-matches. First,
22 there is a category of non-matches that are pending further investigation.
23 These NMs are in a research status during which time KPMG verifies its
24 replication work and, if need be, exchanges information with BellSouth to
25 ensure that the NM is not the result of an error by either party. If KPMG

1 makes a final determination that the NM is appropriate, KPMG lists the NM
2 on its Issues Log. The Issues Log becomes the basis for KPMG to issue
3 exceptions if KPMG deems it appropriate. Consequently, Exhibit AJV-12,
4 which is based on the Issues Log, is the true reflection of the NM conditions
5 encountered by KPMG. If these NMs are not resolved, they could result in
6 a “not satisfactory” finding. However, given the stringent criteria used by
7 KPMG, the existence of NM criteria alone does not indicate that a
8 discriminatory condition exists.

9

10 IMPLICATIONS OF AUDITS I, II AND III

11

12 Q. WHAT IS THE IMPORTANT POINT TO NOTE CONCERNING THE
13 CURRENT STATUS OF THE GEORGIA AUDITS?

14

15 A. It is important to note that KPMG has made extensive progress on virtually
16 every aspect of Audit III, including data replication, a component of the
17 audit that is critical to assessing the reliability of BellSouth’s data. Further,
18 KPMG has already effectively completed two audits and, in the third,
19 KPMG has not found data discrepancies of any significance.

20

21 Q. HAS THE FCC INDICATED WHETHER A COMPLETED AUDIT OF
22 EVERY PERFORMANCE MEASURE IS REQUIRED FOR SECTION 271
23 APPROVAL?

24

25

1 A. Yes. In fact, in the Texas application, the performance data audit upon
2 which SWBT relied addressed only a limited number of SWBT's
3 measures. This evidence, however, was deemed sufficient, in conjunction
4 with the other indicia of reliability, to demonstrate reliability of the data. In
5 the Arkansas/Missouri application, the FCC concluded "that SWBT need
6 not undergo a comprehensive verification of its representations as
7 requested by some parties." *Arkansas/Missouri Order*, ¶ 16. The FCC
8 held that an RBOC need not demonstrate that its data are flawless but
9 rather that there is that there is no "systematic failure" in its data collection
10 and reporting processes. *Arkansas/Missouri Order*, ¶ 18. BellSouth has
11 met that burden. The vast majority of the over 2,300 metrics BellSouth
12 reports every month have never been questioned. Limited issues with
13 certain measures, such as those of which BellSouth has made the Authority
14 aware, "do not undermine the reliability of [an RBOC's] massive data
15 compilation." *Arkansas/Missouri Order*, ¶ 18.

16

17 Q. HOW SHOULD THE TRA VIEW THE GEORGIA AUDITS?

18

19 A. First, the Georgia audits, when viewed on a continuum, serve to
20 corroborate the other indicia of the reliability of BellSouth's data. As
21 BellSouth's analyses make clear, none of the Georgia Exceptions indicate
22 systemic problems with BellSouth's reported results or undermine the
23 conclusion that BellSouth produces accurate and reliable performance
24 data. Audit I was a thorough analysis of BellSouth's first set of
25 performance measurements. As would be expected, KPMG issued

1 exceptions in Audit I, all but two of which BellSouth has resolved. The two
2 remaining Audit I exceptions are minor, as I have already described and, in
3 Audit II, BellSouth satisfied all of KPMG's evaluation criteria.

4
5 Secondly, the satisfactory completion of Audits I and II demonstrate that (1)
6 there are some measures that did not change significantly between the
7 audits, and thus have been fully audited; and (2) while the GPSC may have
8 modified certain measures or added levels of disaggregation to other
9 measures, BellSouth's ability to implement and produce reliable
10 performance data has been satisfactorily audited and has been confirmed
11 by the first two audits and the now largely complete Audit III.

12
13 Thirdly, in Audit III, KPMG issued a total of 21 exceptions in Georgia and
14 referenced 1 exception that has not been issued; this total includes both
15 open and closed exceptions. Of those, 10 currently are either closed or in
16 the closure process. Of the total of 22 issued and yet to be issued
17 exceptions, 15 have no impact on reported results, 5 have less than 0.5%
18 impact, 1 understates performance, and 1 relates to Average Jeopardy
19 Notice Interval, which is unreliable. A description of all Georgia
20 Exceptions, open and closed, is attached as Exhibit AJV-11.

21
22 Noteworthy is the fact that many of the exceptions in Audit III, such as
23 Exception 146 and Draft Exceptions 190 and 192, relate to issues with
24 BellSouth's documentation. While, BellSouth agrees with the comments
25 that some CLECS such as AT&T have made in other proceedings that

1 every effort should be made to have accurate documentation, the fact
2 remains that documentation errors associated with reporting of
3 performance data do not in any way impact the validity of BellSouth's
4 reported results or affect a CLEC's ability to compete.

5
6 Finally, BellSouth's analysis of the PMR-5 Issues Log, attached hereto as
7 Exhibit AJV-12, demonstrates that in total, KPMG has noted 84 issues,
8 including open and closed issues. Of those, 6 were withdrawn by KPMG,
9 15 were moved to Exceptions or Draft Exceptions and already addressed
10 above (3 of the 15 issued are still open), and 12 were merged into other
11 Issues. Of the 51 remaining Issues, 44 are closed. Of the 51 total, 6 have
12 no impact on reported results; 4 have less than 0.5% impact; and 1 relates
13 to Average Jeopardy Notice Interval that is unreliable. Like the exceptions,
14 many of the issues relate to documentation and interval buckets.

15

16

17 FLORIDA AUDITS

18

19 Q. SOME CLECS HAVE RAISED ISSUES WITH THE FLORIDA AUDIT IN
20 OTHER PROCEEDINGS. WOULD YOU ADDRESS THE FLORIDA
21 AUDIT?

22

23 A. Certainly. In Comments filed in the FCC's proceeding to consider
24 BellSouth's joint Georgia and Louisiana interLATA application (CC Docket
25 No. 02-35), AT&T's argued that the KPMG audit in Florida "provides

1 additional evidence that BellSouth's performance data cannot be trusted."
2 That position should be rejected. As BellSouth has explained in each of its
3 affidavits filed in that case and as applies here as well, the evidence upon
4 which BellSouth seeks to rely is the Georgia OSS Test, including the audits
5 of the performance measurement systems, and currently available
6 extensive commercial usage (from Georgia and Louisiana in the FCC 271
7 application and from Tennessee for this proceeding).

8
9 Given, however, that CLECs raised the Florida metrics evaluation in prior
10 proceedings, I will discuss the current results of that evaluation. Actually,
11 the Florida metrics test supports BellSouth's position that its performance
12 data are reliable, rather than refutes it. As in Georgia, none of the Florida
13 exceptions (open or closed) related to the current SQM reveal any
14 significant issues with BellSouth's performance data.

15

16 Q. BRIEFLY DESCRIBE THE FLORIDA EXCEPTIONS.

17

18 A. In total, including both open and closed exceptions, KPMG has issued 30
19 exceptions in Florida based on its audit of the SQM that is similar to the
20 Georgia SQM (i.e. after June 2001). Of those, 12 currently are closed or in
21 the closure process. Of the total of 30, 15 have no impact on reported
22 results, 14 have less than 0.5% impact on reported results, and 1 relates to
23 Average Jeopardy Notice Interval, which is unreliable. A description of all
24 of the Florida Exceptions, open and closed, is attached as Exhibit AJV-13.
25 For example, Exceptions 15, 81 and 153 relate to issues with BellSouth's

1 performance measurements documentation, which, as previously
2 discussed, does not impact the validity of reported results. Moreover,
3 Exception 122 relates to the production of an LSR detail report for xDSL
4 orders, and Exception 152 relates to an issue unique to the SQM Reports.
5 These issues are illustrative of exceptions that do not impact the reported
6 results in the MSS. As BellSouth's analyses make clear, none of the
7 Florida Exceptions indicate systemic problems with BellSouth's reported
8 results.

9
10 AT&T, in other proceedings, specifically cites to a number of Florida
11 Exceptions as evidence of problems with BellSouth's performance data.
12 However, in many cases, AT&T bases its conclusion on BellSouth's initial
13 exception responses, and it is thus understandable why AT&T may have
14 misunderstood the significance of the exceptions. Upon further
15 investigation, BellSouth has determined that the exceptions in Florida are
16 not significant, as demonstrated by Exhibit AJV-13. BellSouth plans to file
17 amended exception responses, where appropriate, with the FPSC as
18 soon as possible.

19
20 AT&T also cites to certain Florida Observations. Observations are simply
21 questions raised by KPMG during the course of the audit. Their existence
22 does not mean that the associated test results would be reported as "Not
23 Satisfied." Exhibit AJV-13 reflects the evaluation status of the Florida
24 Test. Consequently, observations should not be considered by the TRA
25 even were the TRA to conclude that the Florida audit is relevant to

1 assessing BellSouth's checklist compliance in Tennessee, which BellSouth
2 submits is not the case.

3

4 THE ENHANCEMENT TO PMAP – VERSION 4.0

5

6 Q. PLEASE DESCRIBE THE ENHANCEMENT FROM PMAP VERSION 2.6
7 TO 4.0.

8

9 A. BellSouth is in the process of upgrading PMAP from PMAP Version 2.6 to
10 PMAP Version 4.0. BellSouth will not use PMAP 4.0 until May 2002. The
11 upgrade to PMAP Version 4.0 is a normal sequence in BellSouth's data
12 processing capabilities. As the number of performance measurements
13 and levels of disaggregation continue to grow, a more dynamic platform is
14 needed. In fact, BellSouth already is exploring the next version of the
15 PMAP platform, termed PMAP Version 5.0, as BellSouth expects that
16 external and internal demands will dictate further enhancements to the
17 PMAP architecture.

18

19 Q. HOW CAN THE AUTHORITY BE ASSURED THAT THE SCHEDULED
20 UPGRADES TO PMAP WILL NOT IMPACT THE INTEGRITY OF DATA
21 REPORTS?

22

23 A. Prior to the upgrade being completed, BellSouth will conduct extensive
24 testing and validation of the data produced by the two versions. In fact,
25 BellSouth has performed, and currently continues to perform, extensive

1 testing of the data used in the PMAP 2.6 and 4.0 versions. Production
2 validation teams are examining results from both the PMAP 2.6 and 4.0
3 code versions, and comparing those results for every report that is
4 produced. Through at least March 2002 data, BellSouth will continue to
5 report performance data using PMAP Version 2.6.

6

7 Q. HAS BELL SOUTH ADDRESSED THE IMPACT OF THE PMAP
8 UPGRADE TO VERSION 4.0 ON THE GEORGIA THIRD PARTY TESTS
9 WITH THE GEORGIA COMMISSION?

10

11 A. Yes. BellSouth discussed the upgrade with the GPSC as well as the
12 impact of the upgrade on the Georgia Audit. Attached hereto as Exhibit
13 AJV-9 is a letter from BellSouth to the GPSC attaching a report, in which
14 KPMG has concurred, of the effect of the upgrade to PMAP Version 4.0 on
15 the KMPG metrics audit. Contrary to allegations made by CLECS in other
16 proceedings, the upgrade to PMAP Version 4.0 should have no adverse
17 impact on KPMG's audit and should actually facilitate the conclusion of
18 KPMG's work.

19

20 Q. SHOULD THE PMAP UPGRADE HAVE ANY IMPACT ON THE FLORIDA
21 METRICS AUDIT?

22

23 A. As discussed previously in this testimony, BellSouth does not rely on the
24 Florida test in this proceeding to establish 271 checklist compliance.
25 However, to the extent that CLECs have raised the issue in other

proceedings and are likely to raise the same issue in this proceeding, I will respond by stating that the metrics audit in Florida is impacted to the same extent by the upgrade from PMAP Version 2.6 to PMAP Version 4.0 as the Georgia metrics audit. This impact is minimal, as described in Exhibit AJV-9. Also, to reiterate, rather than delaying completion of the audit, the upgrade to PMAP Version 4.0 should allow the audit to complete more quickly than would otherwise be the case.

IX. PERFORMANCE REMEDY PLAN

PERFORMANCE REMEDY PLAN OVERVIEW

Q. BRIEFLY DESCRIBE THE ROLE OF A PERFORMANCE REMEDY PLAN IN MEETING THE REQUIREMENTS OF THE ACT.

A. In the *Second BellSouth Louisiana Order*, the FCC encouraged BOCs seeking 271 relief to adopt enforcement mechanisms that would help to guard against back-sliding following section 271 relief. See FCC Memorandum Opinion and Order, *Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance Inc., for Provision of In-Region, InterLATA Services in Louisiana*, CC Docket No, 98-121, October 13, 1998, ¶ 364. Subsequently, BellSouth proposed, and the GPSC adopted, a Self-Effectuating Enforcement Mechanism (“SEEM”) that fully accords with the FCC’s guidance in this area. The SEEM was developed over several years in workshops with the CLECs

1 and with guidance from state commissions (including Georgia and
2 Louisiana). BellSouth also received guidance from the FCC, its Staff, and
3 the Department of Justice in proposing its current SEEM.

4
5 Q. SHOULD AN ENFORCEMENT PLAN SUCH AS SEEM BE
6 IMPLEMENTED PRIOR TO A GRANT OF INTERLATA AUTHORITY TO
7 BELLSOUTH BY THE FCC?

8
9 A. Although the Authority has already addressed this issue in the Generic
10 Docket and of course will decide the timing of implementation, BellSouth
11 does not believe that a SEEM plan should be implemented before an
12 exercise of 271 authority. In fact, such implementation would be contrary to
13 the purpose of the plan. Nothing in the 1996 Act requires a self-
14 effectuating enforcement plan. The FCC has acknowledged as much in its
15 orders. Specifically, the FCC has made it clear that the primary, if not sole,
16 purpose of a voluntary self-effectuating enforcement mechanism is to guard
17 against RBOC “backsliding” after the RBOC begins to provide interLATA
18 services. Further, the FCC has not identified the implementation of
19 enforcement mechanisms to be a condition of 271 relief. Rather, such a
20 plan would be an additional incentive to ensure that BellSouth continues to
21 comply with the competitive checklist after interLATA relief is granted. (See
22 *Bell Atlantic New York*, ¶ 429-430; *Southwestern Bell Texas Order*, ¶
23 420-421; *Southwestern Bell Kansas/Oklahoma Order*, ¶ 269)
24
25 Enforcement mechanisms and penalties, however, are neither necessary

1 nor required to ensure that BellSouth meets its obligations under Section
2 251 of the Act, and the FCC has never indicated otherwise. In fact, the
3 desire for long distance relief, which is an immediate goal of BellSouth,
4 has to be viewed as a powerful incentive for a Bell Operating Company
5 (“BOC”) to meet its obligations under Section 251 of the Act, including
6 providing nondiscriminatory access to its OSS. The concept of
7 performance penalties, on the other hand, has been developed as an
8 additional incentive for continued compliance after long distance authority
9 is granted. Therefore, it is appropriate that the enforcement mechanism
10 proposal not take effect until the plan is necessary to serve its purpose –
11 i.e., until after BellSouth exercises a grant of interLATA authority.

12

13 Q. YOU STATED PREVIOUSLY THAT THE AUTHORITY VOTED TO ADOPT
14 AN ENFORCEMENT MECHANISM FOR USE IN TENNESSEE IN ITS
15 APRIL 16, 2002 DIRECTORS’ CONFERENCE. WHAT DOES
16 BELL SOUTH PROPOSE WITH RESPECT TO AN ENFORCEMENT
17 PLAN FOR TENNESSEE?

18

19 A. Based on the Authority’s recent decision in the Generic Performance
20 Measurements proceeding (Docket No. 01-00193), adopting an
21 enforcement plan for Tennessee, BellSouth proposes that the Authority
22 adopt, on an interim basis, the SEEM plan that was adopted by the GPSC.
23 The proposed plan is consistent with the Interim SQM where the TRA
24 Generic Plan is not. Consequently, the TRA plan must await
25 implementation of the TRA’s SQM. Also, the TRA plan is more punitive

1 than the interim plan, which is already too punitive. However, BellSouth is
2 not proposing to reargue these issues in this proceeding.

3

4 The Interim SEEM plan is attached as Exhibit AJV-14. Exhibit AJV-14
5 includes an overview of the plan followed by Appendix A, the Fee
6 Schedule; Appendix B, the SEEM Sub-metrics; Appendix C, the Statistical
7 Methodology; Appendix D, the Technical Description; and Appendix E, the
8 SEEM Remedy Procedure.

9

10 The Interim SEEM is the same plan that was filed as part of BellSouth's
11 application to seek InterLATA authority for Georgia and Louisiana by grant
12 of the FCC (CC Docket No. 02-35). This enforcement plan is designed to
13 generate significant payments by BellSouth if it fails to meet applicable
14 benchmarks or retail analogues for measurements included in SEEM. The
15 SEEM consists of three levels of enforcement mechanisms, Tier 1, Tier 2
16 and Tier 3. Under this plan, Tier 1 payments are made directly to the
17 CLECs and Tier 2 payments are made to the Tennessee Regulatory
18 Authority or other state agency. Tier 3 is an additional non-monetary
19 enforcement mechanism that results in a voluntary suspension of long
20 distance sales and marketing.

21

22 CHARACTERISTICS OF AN EFFECTIVE ENFORCEMENT PLAN

23

24 Q. DOES BELL SOUTH'S INTERIM SEEM MEET THE FCC'S DEFINITION
25 OF AN EFFECTIVE ENFORCEMENT PLAN?

1

- 2 A. Yes. BellSouth's Interim SEEM plan meets the 5 characteristics of an
3 effective enforcement plan established by the FCC in the *Bell Atlantic –*
4 *New York Order*. See *Bell Atlantic – New York Order* ¶ 433; GPSC
5 *January 16, 2001 Order* at 20. These characteristics are:
- 6 ▪ potential liability that provides a meaningful and significant incentive to
7 comply with the designated performance standards;
 - 8 ▪ clearly-articulated, pre-determined measures and standards, which
9 encompass a comprehensive range of carrier-to-carrier performance;
 - 10 ▪ a reasonable structure that is designated to detect and sanction poor
11 performance when it occurs;
 - 12 ▪ a self-effectuating mechanism that does not leave the door open
13 unreasonably to litigation and appeal;
 - 14 ▪ and reasonable assurances that the reported data is accurate.

15

16 METHOD OF CALCULATING PENALTIES AND STATISTICAL TESTING

17

18 Q. HOW ARE PENALTY PAYMENTS CALCULATED UNDER THE INTERIM
19 SEEM?

20

21 A. The method of calculating payments is illustrated in Appendix E of Exhibit
22 AJV-14, "BST SEEM Remedy Procedure." The payment is determined by
23 multiplying the fee per transaction from Appendix A of Exhibit AJV-14 by
24 the appropriate volume of transactions. The volume of transactions is
25 calculated as described in Appendix E of Exhibit AJV-14. The

1 “transaction” based approach is scalable (i.e., the more transactions where
2 disparate performance is detected, the higher the penalty).

3

4 The calculation of the volume of transactions to be remedied is different,
5 depending on whether the service has, or does not have a retail analogue.
6 For those services where there is no retail analogue, that is, where
7 BellSouth does not provide the same service or a comparable service in
8 its retail operations, a benchmark applies. This benchmark should be set
9 at the minimum level required to permit an efficient competitor a
10 meaningful opportunity to compete. The affected volume is then
11 determined by a simple comparison of the performance provided to the
12 individual CLEC to the benchmark applicable to the SEEM measurement.
13 If performance does not meet the benchmark, penalties would apply to the
14 number of transactions by which BellSouth missed the benchmark.

15

16 For example, assume BellSouth could be late in returning no more than 10
17 FOCs in a month to meet the material nondiscrimination benchmark.
18 Further assume that BellSouth returned 13 FOCs late in that month.
19 BellSouth would pay a penalty on 3 transactions, which is the number of
20 missed FOCs in excess of the 10 defined as material nondiscriminatory
21 performance. The number of transactions by which BellSouth missed the
22 performance standard, 3 in the above example, is called the “affected
23 volume.”

24

25

1 Q. FOR MEASURES USING BENCHMARKS, IS THERE AN ADJUSTMENT
2 TO THE CALCULATION OF PENALTIES WHEN THERE ARE ONLY A
3 SMALL NUMBER OF TRANSACTIONS?
4

5 A. Yes. When the number of transactions is small, BellSouth's benchmarks
6 are adjusted through the use of a small sample size table. This is a
7 legitimate adjustment because it is possible that BellSouth is delivering
8 compliant performance but the compliant performance is not recognized
9 when performance is based on small universes.
10

11 As an example, if a metric has a benchmark of 90%, and a CLEC has 9
12 transactions, then each of the 9 transactions must meet the standard for the
13 sub-metric. If there is just one failure, the actual performance is 88.8% (8
14 divided by 9). BellSouth's Interim SEEM plan includes a Small Sample
15 Size Table (95% Confidence Interval) as listed in Exhibit AJV-14,
16 Appendix E, to adjust benchmarks for small universes.
17

18 The small sample size table specifies an adjusted benchmark when the
19 number of transactions is small. For example, assume a measurement
20 normally has a 95% benchmark, but there were only five transactions in a
21 given month. In this case, missing only one transaction would result in an
22 80% performance level. The small sample size table would adjust the
23 benchmark from 95% to 80% for a universe of 5 transactions. This is a
24 common statistical practice.
25

1 Q. HOW DOES THE CALCULATION OF PENALTY PAYMENTS DIFFER
2 FOR MEASURES WITH RETAIL ANALOGS?

3

4 A. For those enforcement sub-metrics where BellSouth provides a similar
5 service to its retail operations and a retail analog does exist, the
6 calculations are more complicated due to the need to apply statistical
7 tests. That is, BellSouth will measure how it performed on the retail analog,
8 and BellSouth will measure how it performed when it provided the relevant
9 service to the CLECs. If the results show that BellSouth provided better
10 service to the CLECs, the inquiry is at an end. If, on the other hand, there is
11 a question about whether BellSouth provided nondiscriminatory service, a
12 statistical analysis would be undertaken to determine whether there was
13 actually disparate treatment and whether the treatment would materially
14 affect a CLEC's ability to compete.

15

16 Where there is a retail analog, BellSouth's Interim SEEM plan incorporates
17 the previously discussed Truncated-Z statistical testing methodology,
18 which is described in Appendices C and D of Exhibit AJV-14. However,
19 as an overview, I will discuss the methodology in general here.

20

21 Q. HOW IS THE STATISTICAL TEST USED?

22

23 A. The statistical test is used to determine whether any apparent
24 discrimination is statistically significant. If it were not statistically
25 significant, then the matter would be at an end. However, there is a further

1 question if any apparent difference is statistically significant. That
2 additional question is whether the perceived discrimination is material.
3 The test for materiality that BellSouth proposes also is described in Exhibit
4 AJV-14. However, to conduct the test, BellSouth had to furnish the
5 statistician with a parameter to use in his analysis. That parameter is
6 referred to as “delta” in the statistical formula. Delta will be discussed later
7 in this testimony.

8

9 Q. WHAT HAPPENS UNDER THIS METHODOLOGY ONCE A VALUE FOR
10 DELTA IS CHOSEN?

11

12 A. After the delta parameter is established for measures with retail analogs,
13 the statistical methodology is then used to determine compliance, i.e.,
14 parity, between BellSouth retail and CLEC operations at the “cell” level.
15 The cell level is where the “like-to-like” comparisons of measurement
16 transactions are made based on criteria such as geography, activity type,
17 product type, and volume. Performing the statistical test using like-to-like
18 comparisons ensures the statistical test is valid.

19

20 Under the statistical approach, each cell is tested and a z-score is
21 calculated for the individual cells. If the z-score for a particular test is
22 positive, indicating that superior service is provided to the CLEC, the
23 values are ‘truncated’ to zero. By truncating the positive z-scores to zero,
24 the test is restated as if the CLEC result was exactly the same as retail.
25 Setting the positives to zero also eliminates the possibility to offset the

1 performance in a negative cell with a positive result. Negative test results
2 suggest some level of disparate treatment in service. The test results are
3 then aggregated to produce an overall test statistic, or z-score, for the state
4 that gauges the significance of BellSouth/CLEC performance differences.

5

6 Q. HOW IS THE Z-SCORE USED?

7

8 A. The overall z-score, by itself, does not indicate whether BellSouth is
9 providing parity service. It is only when the overall z-score is compared to
10 a "balancing critical value" that a conclusion may be drawn about
11 compliance or noncompliance based on observed differences in data
12 results. The balancing critical value is the threshold level, calculated based
13 on fixed parameters such as delta, that is compared to the z-score to
14 determine if parity exists; the balancing critical value accounts for the effect
15 of random variation and the materiality of the observed differences
16 between BellSouth and CLEC activity.

17

18 Q. HOW IS THE COMPARISON BETWEEN THE Z-SCORE AND THE
19 BALANCING CRITICAL VALUE USED?

20

21 A. If the overall CLEC z-score is greater than or equal to the balancing critical
22 value, this would mean that the statistical test indicates that parity exists,
23 and no further calculation is necessary. However, if the CLEC z-score is
24 less than the balancing critical value, this means that the statistical test
25 suggests an absence of parity. When noncompliance is concluded, a

1 simple process is used to determine the number of transactions for which
2 remedies apply, i.e., the “affected volume.” See Exhibit AJV-14, Appendix
3 E.

4
5 Q. WOULD YOU DESCRIBE IN MORE DETAIL THE PROCESS OF
6 DETERMINING THE NUMBER OF TRANSACTIONS FOR WHICH
7 REMEDIES APPLY, WHICH YOU REFER TO AS “AFFECTED
8 VOLUME”?

9
10 A. Certainly. The first step in determining the number or transactions for
11 which remedies apply is to compute the “parity gap.” The parity gap is the
12 difference between the CLEC z-score and the balancing critical value. As
13 the parity gap becomes bigger, there is more certainty that the statistical
14 test results are correctly indicating non-parity.

15
16 The parity gap has to be translated into the number of transactions subject
17 to payment. In order to accomplish this, when the parity gap does not
18 exceed 4, a linear function with a slope of $\frac{1}{4}$ is applied to the parity gap to
19 calculate what is called the “volume proportion” or simply the proportion of
20 transactions for which penalties are paid. Thus, the volume proportion is
21 determined by simply dividing the parity gap by 4. Parity gaps of 4.0 or
22 greater will result in 100% of the volume of missed activity being subject to
23 payment. The idea behind this adjustment is that inherent in probability
24 theory is the fact that payment will be rendered even when BellSouth is

25

1 providing parity or even superior service. Use of a linear function with a
2 slope of $\frac{1}{4}$ mitigates this condition.

3

4 Q. HAS THE USE OF A LINEAR FUNCTION WITH A SLOPE OF $\frac{1}{4}$ BEEN
5 REVIEWED BY ANY STATE COMMISSIONS?

6

7 A. Yes. Both the LPSC and GPSC found that BellSouth provided sufficient
8 evidence to support the use of a linear function with a slope of $\frac{1}{4}$.
9 Specifically, BellSouth's statistical experts used linear programming to
10 determine precisely how many missed transactions should be subject to
11 payment. The analysis performed showed that BellSouth's method for
12 determining the number of transactions subject to remedies resulted in 2.3
13 times as many transactions subject to remedies as the linear programming
14 method, which calculated the exact number of transactions that to be
15 remedied. While linear programming is an exact determination of the
16 number of transactions to be remedied, it is computer intensive and could
17 not be used in a production environment. This is the main reason for using
18 the linear function with a slope of $\frac{1}{4}$.

19

20 Q. HOW IS THE VOLUME PROPORTION USED?

21

22 A. Once the volume proportion is calculated, its value is multiplied by the total
23 number of impacted CLEC transactions for each of the individual cells that
24 failed the z-test. This yields the number of transactions to be remedied, by
25 cell, called the "affected volume." The affected volume for each cell is

1 totaled, which produces the number of transactions that should be
2 remedied for a given CLEC in the state. The affected volume is then
3 simply multiplied by the per transaction amount contained in the
4 BellSouth's fee schedule for that measurement category.

5

6 BellSouth's Fee Schedule for Tier 1 and Tier 2 is listed in Appendix A of
7 Exhibit AJV-14. These tables depict the remedy amount per occurrence.

8

9 Q. IS BELL SOUTH'S FEE SCHEDULE CONSISTENT WITH THE DESIGN
10 OF REMEDY PLANS ALREADY APPROVED BY THE FCC IN SECTION
11 271 CASES?

12

13 A. Yes. The early development of BellSouth's fee schedule was influenced by
14 the enforcement plan used in Texas. The individual amounts in BellSouth's
15 fee schedule range from \$1.00 for billing (where the units are individual
16 billing dollars) up to \$5,000 for collocation. The Texas plan has amounts
17 ranging from \$25 to \$800 per occurrence. The principles of BellSouth's
18 fee schedule are similar to SWBT in Texas in that measurements are
19 stratified so that the penalties are greater for the measurements that have
20 a greater impact on competition. Texas divides measurements into Low,
21 Medium or High categories. BellSouth accomplishes the same thing but
22 on a more granular scale.

23

24 As an example, the fee for the ordering category, which includes Firm
25 Order Response Interval, is \$40. This \$40 is applied to the number of

1 orders required to bring the FOC response interval up to the benchmark,
2 such as 95% within 3 hours for fully mechanized FOCs. By comparison,
3 the penalty amount for UNE provisioning, which includes Customer
4 Coordinated Conversions and Hot Cuts, is \$400. Thus, a penalty is paid
5 on the hot cuts exceeding the benchmark that, in this example, is 95%
6 within 15 minutes of the scheduled start time. The effect of these two
7 penalties is to more heavily weight the consequences for missing a hot cut
8 appointment, when a customer is temporarily out of service, than the return
9 of the FOC within the specified intervals that has minimal service
10 implications.

11

12 Additionally, input from various regulatory agencies had a significant
13 influence in deriving this stratified fee schedule. Also like the Texas
14 enforcement plan, the penalties escalate over time as a result of repeated
15 failures in successive months. BellSouth's fee schedule is more generous
16 than Texas in that there is not a cap or a limit for payments that may be
17 required for each measurement.

18

19 THE STATISTICAL PARAMETER "DELTA"

20

21 Q. IN YOUR EARLIER DESCRIPTION OF THE STATISTICAL
22 METHODOLOGY YOU DEFERRED DISCUSSION OF THE
23 PARAMETER DELTA. WOULD YOU NOW RETURN TO THAT
24 DISCUSSION?

25

1 A. Certainly. In general terms, the parameter “delta” is used to establish the
2 difference in the BellSouth and CLEC statistical means that should be
3 regarded as material. In other words, the delta provides a way to
4 determine whether a difference in performance measurements indicates
5 that a difference in performance provided by BellSouth to itself and to a
6 CLEC is material and should trigger the application of penalties.

7
8 In the FCC’s *Bell Atlantic –New York Order*, it was noted that random
9 variation is inherent in the ILEC’s process of providing interconnection and
10 access to UNEs. See *Bell Atlantic – New York Order*, Appendix B ¶ 2.
11 Consequently, the FCC recognized the appropriateness of determining
12 whether or not a difference is, in fact, material. The standard that applies
13 here is whether BellSouth provides service in substantially the same time
14 and manner to CLECs and itself. Without a materiality component, any
15 statistically significant difference in performance would be considered
16 substantial, which is not the case. BellSouth’s use of the delta takes into
17 account this very circumstance and creates a standard to determine when
18 the variation should be treated as material.

19
20 Q. WHY IS IT NECESSARY TO DETERMINE THE DELTA VALUE OUTSIDE
21 OF A PURE STATISTICAL ANALYSIS?

22
23 A. The statistical test discussed by the statisticians cannot determine the
24 parameter delta because a pure statistical analysis will only yield a
25 conclusion as to whether or not the difference between two results is

1 statistically significant. The fact, however, that there is a statistical
2 difference between results does not necessarily mean that the difference in
3 the two results is material. Because the objective of the Interim SEEM is to
4 detect any service differences that could affect a customer's choice of
5 service provider, a materiality measure is appropriate.

6

7 Q. WHAT WOULD BE THE IMPACT OF A PARTICULAR CHOICE OF
8 DELTA?

9

10 A. As an example, the GPSC specified a delta value of 0.5 to evaluate
11 individual CLEC performance (Tier 1), and a delta value of 0.35 to evaluate
12 CLEC aggregate results (Tier 2 & 3). Using these different values for delta
13 means that individual CLEC (Tier 1) results that are outside one-quarter
14 standard deviation of BellSouth's results are deemed materially different.
15 Likewise, the delta value of 0.35 for Tier 2 & 3 means that a difference in
16 results of over approximately one-sixth standard deviation is deemed
17 material. These relationships are due to the fact that the formulas take the
18 assigned delta and divide the delta in half to get the number of standard
19 deviations involved. The values of delta are very stringent and treat fairly
20 small differences as material, particularly at high volumes.

21

22 Q. BRIEFLY DESCRIBE BELL SOUTH'S INTERIM SEEM MEASURES.

23

24 A. The Interim SEEM measurement set contains key measures in all areas
25 that affect customers, plus some additional process measures.

1 BellSouth's enforcement measurements are listed in Appendix B of Exhibit
2 AJV-14. As an example, Percent Missed Installation Appointments is
3 listed as a SEEM measurement in all three Tiers in Appendix B of Exhibit
4 AJV-14. Percent Missed Installation Appointments is an indicator of
5 BellSouth's ability to achieve commitments to its customers.

6
7 The level of disaggregation in the Interim SEEM and the retail analog or
8 benchmark for the Interim SEEM Measurement are reflected in
9 measurement P-3 of the Interim SQM, Exhibit AJV-1. The specific SEEM
10 sub-metrics for this SQM measurement are listed in the SEEM
11 Disaggregation Table for 7 product categories. When these product
12 categories are compared to the retail analogs, and if materially disparate
13 performance is detected, a penalty amount is calculated as previously
14 described.

15
16 Q. IS THE INTERIM SEEM DISAGGEGATION DIFFERENT IN SOME
17 CASES FROM THE SQM DISAGGREGATION?

18
19 A. Yes. In some instances, the performance standards in the Interim SEEM
20 remedy plan differ from the performance standards that are used to
21 measure nondiscriminatory performance in the performance measurement
22 plan. The Interim SEEM measurements often aggregate several SQM
23 sub-metrics, which may necessitate using a slightly different standard.
24 Similarly, where an Interim SEEM standard is in Tier 2, it may be
25 appropriate to use a different standard from the SQM since Tier 2 is

1 intended to address chronic, persistent, material disparity. However, even
2 though the SEEM measures may be less disaggregated than the SQM,
3 cell level comparisons are still made at a more disaggregated level than
4 that reflected in the SQM. Specifically, the transactions are disaggregated
5 at the cell level such that like-to-like comparisons are made.

6

7 Q. SHOULD BELL SOUTH'S INTERIM SEEM PLAN INCLUDE ALL OF THE
8 MEASURES IN THE PERFORMANCE MEASUREMENT PLAN IN
9 ORDER TO BE EFFECTIVE?

10

11 A. No. BellSouth's Interim SEEM plan includes clearly articulated, pre-
12 determined measurements and standards that encompass a
13 comprehensive range of carrier-to-carrier performance. The Interim SEEM
14 encompasses measurements of key outcomes where a failure to produce
15 that outcome would have a direct, significant effect on competition. An
16 enforcement plan should not generally include measures that are
17 interrelated because that simply results in multiple penalties for the same
18 failure. As a result, BellSouth's Interim SEEM includes many, but not all, of
19 the measurements of the SQM.

20

21 The FCC also rejected the argument that all measures used to monitor
22 performance be included in an enforcement plan stating: "We also believe
23 that the scope of performance covered by the Carrier-to-Carrier metrics is
24 sufficiently comprehensive, and that the New York Commission reasonably
25 selected key competition-affecting metrics from this list for inclusion in the

1 enforcement plan. We disagree with commenters who suggest that
2 additional metrics must be added to the plan in order to ensure its
3 effectiveness, and note that the New York Commission has considered
4 and rejected similar arguments.” *Bell Atlantic – New York Order* ¶ 439.

5

6 Q. BELLSOUTH HAS PROPOSED THAT THE TRA ADOPT THE GEORGIA
7 SEEM PLAN AS AN INTERIM SEEM PLAN. ARE THERE ANY
8 MEASUREMENTS THAT BELLSOUTH PROPOSES TO ADD TO THE
9 SEEM PLAN AS A RESULT OF WORKSHOPS HELD IN GEORGIA?

10

11 A. Yes. During the Georgia performance measurements workshops, in
12 response to a request by the CLEC coalition, BellSouth agreed to include
13 the Service Order Accuracy metric as a Tier II SEEM measure. As stated
14 in the March 28, 2002 letter from Guy Hicks, General Counsel – Tennessee
15 for BellSouth, to the Authority, attached as Exhibit AJV-15, BellSouth has
16 included the Service Order Accuracy measure in Tier II of the proposed
17 SEEM plan (see attached Exhibit AJV-14).

18

19 Q. ARE THERE ANY MEASURES THAT HAVE BEEN REMOVED FROM
20 SEEM IN GEORGIA?

21

22 A. Yes. As stated previously in my testimony, the LNP Average Disconnect
23 Timeliness Measure is flawed in that it is not an accurate measure the
24 actual end user experience. BellSouth filed a motion with the GPSC to
25 modify the LNP Average Disconnect Timeliness, which was granted in

1 part. A copy of the GPSC's Staff recommendation that was adopted by
2 the Commission is attached as Exhibit AJV-5. As a result of this ruling, the
3 LNP Average Disconnect Timeliness measure is not currently subject to
4 penalties under the penalty plan in Georgia. Therefore, the attached
5 SEEM document does not include the LNP Average Disconnect
6 Timeliness measure in the list for Tier I or Tier II metrics.

7

8 INTERIM SEEM CAP ON FINANCIAL LIABILITY

9

10 Q. WHY DOES BELL SOUTH PROPOSE AN ABSOLUTE CAP ON
11 PENALTY PAYMENTS?

12

13 A. The purpose of this enforcement plan is to prevent "backsliding" when
14 BellSouth obtains interLATA relief in Georgia. The absolute cap contained
15 in BellSouth's plan equates to 44% of BellSouth's net revenue in
16 Tennessee. Clearly, this is a more than sufficient deterrent to
17 "backsliding". The operation of enforcement mechanisms is very complex
18 and there is little experience in applying them. An absolute cap provides a
19 fail-safe to prevent the mechanisms from spiraling out of control. Such a
20 mechanism is even more necessary in these early stages of enforcement
21 mechanism implementation.

22

23 The 44% cap on Interim SEEM penalties proposed by BellSouth far
24 exceeds the cap amounts approved by the FCC in approving the long
25 distance applications of SBC-Texas and Bell Atlantic - New York and more

1 recently in the Kansas and Oklahoma application. It is important to
2 remember that the self-effectuating cap in the enforcement plan is not an
3 overall cap on BellSouth's liability for performance failures. As the FCC
4 has pointed out, a penalty plan is "not the only means of ensuring that [the
5 RBOC] continues to provide nondiscriminatory service to competing
6 carriers." *Bell Atlantic – New York Order* ¶ 435. Thus, any
7 characterization of the enforcement cap as a total cap on BellSouth's
8 liability for performance failures is misleading.

9
10 Q. SHOULD THERE BE A PROVISION IN THE SEEM PLAN THAT
11 AUTOMATICALLY TRIGGERS ADDITIONAL REGULATORY
12 PROCEEDINGS TO AFFIRM OR MODIFY PAYMENTS AFTER A
13 CERTAIN LEVEL IS REACHED?

14
15 A. No. BellSouth does not believe that it should include a provision in SEEM
16 to trigger additional regulatory proceedings automatically to affirm or
17 modify remedy payments, when payments exceed a certain amount. This
18 type of provision is unnecessary. Should BellSouth fail to meet the specific
19 measurements ordered, the penalties and remedies of each tier become
20 effective. As each tier is triggered, the penalties provide increasing
21 financial incentives for BellSouth to remedy these issues. To require an
22 automatic regulatory proceeding when penalty payments reach a certain
23 amount would place an unnecessary burden on both the TRA and on
24 BellSouth, and does nothing to speed up resolution of the issues. Further,
25 there are other legal remedies available to the CLECs should the issues

1 not be resolved after exhaustion of the remedies available under the two
2 tiers.

3

4 Q. ARE THERE CIRCUMSTANCES UNDER WHICH BELL SOUTH
5 SHOULD BE RELIEVED OF LIABILITIES UNDER THE SEEM?

6

7 A. Yes. Under the Interim SEEM, BellSouth would be allowed to seek relief
8 from liability for penalties under Tier 1 or Tier 2 enforcement mechanisms
9 for noncompliance with a performance measurement if such
10 noncompliance was the result of: (1) a Force Majeure event; (2) an act or
11 omission by a CLEC that is in bad faith; (3) an act or omission by a CLEC
12 that is contrary to any of its obligations under its Interconnection
13 Agreement; (4) an act or omission by the CLEC that is contrary to any of its
14 obligations under the Act, TRA rule, or state law; or, (5) an act or omission
15 associated with third-party systems or equipment.

16

17 METHOD OF PAYMENT; DISPUTES; AUDITS

18

19 Q. WHAT OTHER PROVISIONS ARE PROPOSED BY BELL SOUTH
20 UNDER THE INTERIM SEEM?

21

22 A. BellSouth proposes the following provisions for method of remedy
23 payments, dispute resolution and audits:

24

25 Method of remedy payments

1 Tier 1 payments are sent to the affected CLEC by the 15th of the second
2 month following the month for which disparate performance is detected. In
3 other words, payment would be rendered by the 15th of May for March
4 performance.

5

6 Tier 2 payments are sent to the Tennessee Regulatory Authority or other
7 designated State agency by the 15th of the second month following the
8 three months average for which disparate performance is detected. In
9 other words, payment would be rendered by the 15th of May for January
10 through March performance.

11

12 *Dispute Resolution*

13 If a CLEC disputes the amount paid to the CLEC under Tier 1 enforcement
14 mechanisms, the CLEC should submit a written claim to BellSouth within
15 sixty (60) days after the date of the performance measurement report from
16 which the dispute arose. BellSouth will investigate all claims and provide
17 the CLEC with written findings within thirty (30) days after receipt of the
18 claim.

19

20 If BellSouth determines that the CLEC is owed additional amounts,
21 BellSouth will pay the CLEC such additional amounts within thirty (30) days
22 after its findings along with six (6) percent simple interest per annum.
23 However, the CLEC would be responsible for all administrative costs
24 associated with resolution of disputes that result in no actual payment
25 being owed by BellSouth.

1

2 Audits

3 At the end of each calendar year, BellSouth will have an independent
4 auditing and accounting firm certify that all penalties under Tier 1 and Tier 2
5 enforcement mechanisms were paid and accounted for in accordance with
6 Generally Accepted Accounting Principles. Further, KPMG has already
7 been retained to audit SEEM and is in the process of conducting that audit.

8

9 **X. CONCLUSION**

10

11 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

12

13 A. In summary, for evaluating BellSouth's performance, BellSouth proposes
14 that the Authority use an interim set of performance measurements that are
15 available to the TRA today, attached as Exhibit AJV-1. These
16 measurements are based on those recently ordered by the Georgia Public
17 Service Commission and will allow the TRA to conduct a comprehensive
18 performance evaluation. The measurement results are displayed in a
19 format that is familiar to the FCC, referred to herein as the "MSS format".

20

21 BellSouth also proposes that the Authority adopt, on an interim basis, the
22 SEEM plan adopted by the Georgia Public Service Commission, attached
23 as Exhibit AJV-14, for use in Tennessee. The Interim SEEM is the same
24 plan that was filed as part of BellSouth's application to seek interLATA
25 authority for Georgia and Louisiana by grant of the FCC (CC Docket No.

1 02-35). As previously discussed, this plan should only take effect after
2 BellSouth exercises a grant of InterLATA authority by the FCC. Prior to
3 that time there is no opportunity for backsliding, which is the purpose of the
4 plan. The Interim SEEM plan is consistent with the five characteristics of
5 an effective remedy plan as articulated by the FCC. It is more than a
6 sufficient deterrent to backsliding by an ILEC as required by the FCC's
7 interpretation of the 1996 Act.

8
9 The foregoing testimony also includes an analysis of the third party testing
10 done in Georgia, which is actually the combination of three audits.
11 Notwithstanding the fact that exceptions were issued by KPMG during the
12 course of three phases of testing, as would be expected, none of the
13 exceptions or issues raised has an appreciable impact on the reliability of
14 the data reported. Further, and importantly, KPMG's Georgia test results
15 show that BellSouth has no deficiencies that would create a materially
16 adverse impact on competition.

17
18 While BellSouth does not rely on the Florida audits to establish its 271
19 checklist compliance, some CLECs have raised issues concerning this
20 testing in other proceedings. However, a practical review of the current
21 Florida test results merely confirm what was found in the Georgia audits –
22 that BellSouth's data are reliable.

23
24 This testimony includes the performance data for Tennessee operations for
25 July 2001 through January 2002 with detailed analysis for November 2001

1 through January 2002. Each month hereafter, for the duration of this
2 proceeding, BellSouth will file succeeding months' data in MSS format until
3 such time as BellSouth fully implements the permanent performance
4 measurements that the Authority orders in the Generic Performance
5 Measurements Docket.

6

7 BellSouth believes that the data it provides will allow the Authority to
8 evaluate thoroughly BellSouth's performance and its compliance with the
9 requirements of section 271 of the Telecommunications Act of 1996. In
10 particular, the data provided will show that BellSouth is providing
11 nondiscriminatory access to CLECs in Tennessee. See attached Exhibit
12 AJV-3.

13

14 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

15

16 A. Yes.

17

18

19

20

21

22

23

24

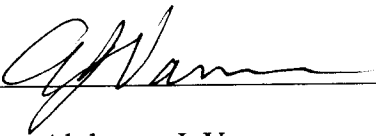
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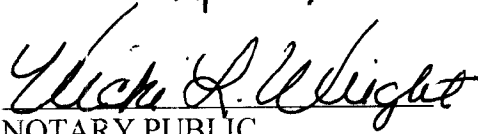
STATE OF: Georgia
COUNTY OF: Fulton

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Alphonso J. Varner – Assistant Vice President - Interconnection Operations, BellSouth Telecommunications Inc., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Tennessee Regulatory Authority in Docket No. 97-00309 on behalf of BellSouth Telecommunications, Inc., and if present before the Authority and duly sworn, his testimony would be set forth in the annexed testimony consisting of 92 pages and 16 exhibit(s).


Alphonso J. Varner

Sworn to and subscribed
before me on April 26, 2002


NOTARY PUBLIC

Notary Public, Cobb County, Georgia
My Commission Expires June 19, 2005

EXHIBIT NO. AJV – 1

Interim SQM

BellSouth Service Quality Measurement Plan (SQM)

Tennessee Interim Performance Metrics

**Measurement Descriptions
Version 0.03**

Issue Date: April 26, 2002

Introduction

The BellSouth Service Quality Measurement Plan (SQM) describes in detail the measurements produced to evaluate the quality of service delivered to BellSouth's customers both wholesale and retail. The SQM was developed to respond to the requirements of the Communications Act of 1996 Section 251 (96 Act) which required BellSouth to provide non-discriminatory access to Competitive Local Exchange Carriers (CLEC)¹ and its Retail Customers. The reports produced by the SQM provide regulators, CLECs and BellSouth the information necessary to monitor the delivery of non-discriminatory access.

This plan results from the many divergent forces evolving from the 96 Act. The 96 Act, numerous arbitration cases, LPSC sponsored collaborative workshops (10/98-02/00), and proceedings in Alabama, Florida, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee have influenced and continue to influence the SQM.

The SQM and the reports flowing from it must change to reflect the dynamic requirements of the industry. New measurements are added as new products, systems, and processes are developed and fielded. New products and services are added as the markets for them develop and the processes stabilize. The measurements are also changed to reflect changes in systems, correct errors, and respond to both 3rd Party audit requirements and the Tennessee Regulatory Authority.

This document is intended for use by someone with knowledge of telecommunications industry, information technologies and a functional knowledge of the subject areas covered by the BellSouth Performance Measurements and the reports that flow from them.

Once it is approved, the most current copy of this document can be found on the web at URL: <https://pmap.bellsouth.com> in the Help folder.

Report Publication Dates

Each month, preliminary SQM reports will be posted to BellSouth's SQM web site (<https://www.pmap.bellsouth.com>) by 8:00 A.M. EST on the 21st day of each month or the first business day after the 21st. Final validated SQM reports will be posted by 8:00 A.M. on the last day of the month. Reports not posted by this time will be considered late for SEEM payment purposes. Preliminary SEEM reports will be posted on the same day as the SQM validated reports. Validated SEEM reports will be posted on the 15th of the following month. Payments due will also be paid on the 15th of the following month. For instance: May data will be posted in preliminary SQM reports on June 21. Final validated SQM reports and preliminary SEEM reports will be posted on the last day of June. Final validated SEEM reports will be posted and payments mailed on July 15th.

1. Alternative Local Exchange Companies (ALEC) and Competing Local Providers (CLP) are referred to as Competitive Local Exchange Carriers (CLEC) in this document.

Report Delivery Methods

CLEC SQM and SEEM reports will be considered delivered when posted to the web site. The Tennessee Regulatory Authority (TRA) will be given access to the web site. In addition, a copy of the Monthly State Summary reports will be filed with the TRA as soon as possible after the last day of each month.

Document Number: TN-V003-041502

Revision History

Version	Issue Date	Changes
V 0.01	Mar 12, 2001	Initial BellSouth Proposal
V 0.02	Jul 16, 2001	
V 0.02	Apr 15, 2002	Interim version based on GA 4/6/01 with modifications

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Section 1: Operations Support Systems (OSS)

OSS-1: Average Response Time and Response Interval (Pre-Ordering/Ordering)

Definition

Average response time and response intervals are the average times and number of requests responded to within certain intervals for accessing legacy data associated with appointment scheduling, service & feature availability, address verification, request for Telephone numbers (TNs), and Customer Service Records (CSRs).

Exclusions

None

Business Rules

The average response time for retrieving pre-order/order information from a given legacy system is determined by summing the response times for all requests submitted to the legacy systems during the reporting period and dividing by the total number of legacy system requests for that month.

The response interval starts when the client application (LENS or TAG for CLECs and RNS or ROS for BellSouth) submits a request to the legacy system and ends when the appropriate response is returned to the client application. The number of accesses to the legacy systems during the reporting period which take less than 2.3 seconds, the number of accesses which take more than 6 seconds, and the number which are less than or equal to 6.3 seconds are also captured.

Calculation

Response Time = (a - b)

- a = Date & Time of Legacy Response
- b = Date & Time of Legacy Request

Average Response Time = c / d

- c = Sum of Response Times
- d = Number of Legacy Requests During the Reporting Period

Report Structure

- Not CLEC Specific
- Not Product/Service Specific
- Regional Level

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Legacy Contract (per reporting dimension)• Response Interval• Regional Scope	<ul style="list-style-type: none">• Report Month• Legacy Contract (per reporting dimension)• Response Interval• Regional Scope

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • RSAG – Address (Regional Street Address Guide-Address) – stores street address information used to validate customer addresses. CLECs and BellSouth query this legacy system. • RSAG – TN (Regional Street Address Guide-Telephone number) – contains information about facilities available and telephone numbers working at a given address. CLECs and BellSouth query this legacy system. • ATLAS (Application for Telephone Number Load Administration and Selection) – acts as a warehouse for storing telephone numbers that are available for assignment by the system. It enables CLECs and BellSouth service reps to select and reserve telephone numbers. CLECs and BellSouth query this legacy system. • COFFI (Central Office Feature File Interface) – stores information about product and service offerings and availability. CLECs query this legacy system. • DSAP (DOE Support Application) – provides due date information. CLECs and BellSouth query this legacy system. • HAL/CRIS (Hands-Off Assignment Logic/Customer Record Information System) – a system used to access the Business Office Customer Record Information System (BOCRIS). It allows BellSouth servers, including LENS, access to legacy systems. CLECs query this legacy system. • P/SIMS (Product/Services Inventory Management system) – provides information on capacity, tariffs, inventory and service availability. CLECs query this legacy system. • OASIS (Obtain Available Services Information Systems) – Information on feature and rate availability. BellSouth queries this legacy system. 	<ul style="list-style-type: none"> • Parity + 2 seconds

OSS-1: Average Response Time and Response Interval (Pre-Ordering/Ordering)

Table 1: Legacy System Access Times For RNS

System	Contract	Data	< 2.3 sec.	> 6 sec.	<= 6.3 sec.	Avg. Sec.	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x	x
DSAP	DSAP	Schedule	x	x	x	x	x
CRIS	CRSACCTS	CSR	x	x	x	x	x
OASIS	OASISCAR	Feature/Service	x	x	x	x	x
OASIS	OASISLPC	Feature/Service	x	x	x	x	x
OASIS	OASISMTN	Feature/Service	x	x	x	x	x
OASIS	OASISBIG	Feature/Service	x	x	x	x	x

Table 2: Legacy System Access Times For R0S

System	Contract	Data	< 2.3 sec.	> 6 sec.	<= 6.3 sec.	Avg. sec.	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x	x

Table 2: Legacy System Access Times For R0S

System	Contract	Data	< 2.3 sec.	> 6 sec.	<= 6.3 sec.	Avg. sec.	# of Calls
DSAP	DSAP	Schedule	x	x	x	x	x
CRIS	CRSOCSR	CSR	x	x	x	x	x
OASIS	OASISBIG	Feature/Service	x	x	x	x	x

Table 3: Legacy System Access Times For LENS

System	Contract	Data	< 2.3 sec.	> 6 sec.	≤6.3 sec.	Avg. sec.	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x	x
DSAP	DSAP	Schedule	x	x	x	x	x
HAL	HAL/CRIS	CSR	x	x	x	x	x
COFFI	COFFI/USOC	Feature/Service	x	x	x	x	x
P/SIMS	PSIMS/ORB	Feature/Service	x	x	x	x	x

Table 4: Legacy System Access Times For TAG

System	Contract	Data	< 2.3 sec.	> 6 sec.	≤6.3 sec.	Avg. sec.	# of Calls
RSAG	RSAG-TN	Address	x	x	x	x	x
RSAG	RSAG-ADDR	Address	x	x	x	x	x
ATLAS	ATLAS-TN	TN	x	x	x	x	x
ATLAS	ATLAS-MLH	TN	x	x	x	x	x
ATLAS	ATLAS-DID	TN	x	x	x	x	x
DSAP	DSAP	Schedule	x	x	x	x	x
CRIS	CRSECSRL	CSR	x	x	x	x	x
CRIS	CRSECSR	CSR	x	x	x	x	x

SEEM Measure

SEEM Measure		
Yes	Tier I	
	Tier II	X
	Tier III	

Note: CLEC specific data is not available in this measure. Queries of this sort do not have company specific signatures.

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none"> • RSAG – Address (Regional Street Address Guide-Address) – stores street address information used to validate customer addresses. CLECs and BellSouth query this legacy system. • RSAG – TN (Regional Street Address Guide-Telephone number) – contains information about facilities available and telephone numbers working at a given address. CLECs and BellSouth query this legacy system. • ATLAS (Application for Telephone Number Load Administration and Selection) – acts as a warehouse for storing telephone numbers that are available for assignment by the system. It enables CLECs and BellSouth service reps to select and reserve telephone numbers. CLECs and BellSouth query this legacy system. • COFFI (Central Office Feature File Interface) – stores information about product and service offerings and availability. CLECs query this legacy system. • DSAP (DOE Support Application) – provides due date information. CLECs and BellSouth query this legacy system. • HAL/CRIS (Hands-Off Assignment Logic/Customer Record Information System) – a system used to access the Business Office Customer Record Information System (BOCRIS). It allows BellSouth servers, including LENS, access to legacy systems. CLECs query this legacy system. • P/SIMS (Product/Services Inventory Management system) – provides information on capacity, tariffs, inventory and service availability. CLECs query this legacy system. • OASIS (Obtain Available Services Information Systems) – Information on feature and rate availability. BellSouth queries this legacy system. 	<ul style="list-style-type: none"> • Percent Response Received within 6.3 seconds: > 95% • Parity + 2 seconds

OSS-1: Average Response Time and Response Interval (Pre-Ordering/Ordering)

SEEM OSS Legacy Systems

System	BellSouth	CLEC
Telephone Number/Address		
RSAG-ADDR	RNS, ROS	TAG, LENS
RSAG-TN	RNS, ROS	TAG, LENS
ATLAS	RNS,ROS	TAG, LENS
Appointment Scheduling		
DSAP	RNS, ROS	TAG, LENS
CSR Data		
CRSACCTS	RNS	
CRSOCRSR	ROS	
HAL/CRIS		LENS
CRSECSRL		TAG
CRSECSR		TAG
Service/Feature Availability		
OASISBIG	RNS, ROS	

System	BellSouth	CLEC
PSIMS/ORB		LENS

OSS-1: Average Response Time and Response Interval (Pre-Ordering/Ordering)

OSS-2: Interface Availability (Pre-Ordering/Ordering)

Definition

Percent of time applications are functionally available as compared to scheduled availability. Calculations are based upon availability of applications and interfacing applications utilized by CLECs for pre-ordering and ordering. “Functional Availability” is defined as the number of hours in the reporting period that the applications/interfaces are available to users. “Scheduled Availability” is defined as the number of hours in the reporting period that the applications/interfaces are scheduled to be available.

Scheduled availability is posted on the Interconnection web site: (www.interconnection.bellsouth.com/oss/oss_hour.html)

Exclusions

- CLEC-impacting troubles caused by factors outside of BellSouth's purview, e.g., troubles in customer equipment, troubles in networks owned by telecommunications companies other than BellSouth, etc.
- Degraded service, e.g., slow response time, loss of non-critical functionality, etc.

Business Rules

This measurement captures the functional availability of applications/interfaces as a percentage of scheduled availability for the same systems. Only full outages are included in the calculations for this measure. Full outages are defined as occurrences of either of the following:

- Application/interfacing application is down or totally inoperative.
- Application is totally inoperative for customers attempting to access or use the application. This includes transport outages when they may be directly associated with a specific application.

Comparison to an internal benchmark provides a vehicle for determining whether or not CLECs and retail BST entities are given comparable opportunities for use of pre-ordering and ordering systems.

Calculation

Interface Availability (Pre-Ordering/Ordering) = (a / b) X 100

- a = Functional Availability
- b = Scheduled Availability

Report Structure

- Not CLEC Specific
- Not Product/Service Specific
- Regional Level

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Legacy Contract Type (per reporting dimension)• Regional Scope• Hours of Downtime	<ul style="list-style-type: none">• Report Month• Legacy Contract Type (per reporting dimension)• Regional Scope• Hours of Downtime

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Regional Level	<ul style="list-style-type: none">• >= 99.5%

OSS Interface Availability

Application	Applicable to	% Availability
EDI	CLEC	x
TAG	CLEC	x
LENS	CLEC	x
LEO	CLEC	x
LESOG	CLEC	x
LNP Gateway	CLEC	x
COG	CLEC	Under Development
SOG	CLEC	Under Development
DOM	CLEC	Under Development
DOE	CLEC/BellSouth	x
SONGS	CLEC/BellSouth	x
ATLAS/COFFI	CLEC/BellSouth	x
BOCRIS	CLEC/BellSouth	x
DSAP	CLEC/BellSouth	x
RSAG	CLEC/BellSouth	x
SOCS	CLEC/BellSouth	x
CRIS	CLEC/BellSouth	x

OSS-2: Interface Availability (Pre-Ordering/Ordering)

SEEM Measure

SEEM Measure		
Yes	Tier I	
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Regional Level	• >= 99.5%

SEEM OSS Interface Availability

Application	Applicable to	% Availability
EDI	CLEC	x
HAL	CLEC	x
LENS	CLEC	x
LEO Mainframe	CLEC	x
LESOG	CLEC	x
PSIMS	CLEC	x
TAG	CLEC	x

OSS-2: Interface Availability (Pre-Ordering/Ordering)

OSS-3: Interface Availability (Maintenance & Repair)

Definition

Percent of time applications are functionally available as compared to scheduled availability. Calculations are based upon availability of applications and interfacing applications utilized by CLECs for maintenance and repair. "Functional Availability" is defined as the number of hours in the reporting period that the applications/interfaces are available to users. "Scheduled Availability" is defined as the number of hours in the reporting period that the applications/interfaces are scheduled to be available.

Scheduled availability is posted on the Interconnection web site: (www.interconnection.bellsouth.com/oss/oss_hour.html)

Exclusions

- CLEC-impacting troubles caused by factors outside of BellSouth's purview, e.g., troubles in customer equipment, troubles in networks owned by telecommunications companies other than BellSouth, etc.
- Degraded service, e.g., slow response time, loss of non-critical functionality, etc.

Business Rules

This measurement captures the functional availability of applications/interfaces as a percentage of scheduled availability for the same systems. Only full outages are included in the calculations for this measure. Full outages are defined as occurrences of either of the following:

- Application/interfacing application is down or totally inoperative.
- Application is totally inoperative for customers attempting to access or use the application. This includes transport outages when they may be directly associated with a specific application.

Comparison to an internal benchmark provides a vehicle for determining whether or not CLECs and retail BST entities are given comparable opportunities for use of maintenance and repair systems.

Calculation

OSS Interface Availability $(a / b) \times 100$

- a = Functional Availability
- b = Scheduled Availability

Report Structure

- Not CLEC Specific
- Not Product/Service Specific
- Regional Level

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Availability of CLEC TAFI• Availability of LMOS HOST, MARCH, SOCS, CRIS, PREDICTOR, LNP and OSPCM• ECTA	<ul style="list-style-type: none">• Availability of BellSouth TAFI• Availability of LMOS HOST, MARCH, SOCS, CRIS, PREDICTOR, LNP and OSPCM

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Regional Level	<ul style="list-style-type: none">• $\geq 99.5\%$

OSS Interface Availability (M&R)

OSS Interface	% Availability
BST TAFI	x
CLEC TAFI	x
CLEC ECTA	x
BellSouth & CLEC	x
CRIS	x
LMOS HOST	x
LNP	x
MARCH	x
OSPCM	x
PREDICTOR	x
SOCS	x

SEEM Measure

SEEM Measure		
Yes	Tier I	
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Regional Level	• >= 99.5%

OSS Interface Availability (M&R)

OSS Interface	% Availability
CLEC TAFI	x
CLEC ECTA	x

OSS-4: Response Interval (Maintenance & Repair)

Definition

The response intervals are determined by subtracting the time a request is received on the BellSouth side of the interface from the time the response is received from the legacy system. Percentages of requests falling into each interval category are reported, along with the actual number of requests falling into those categories.

Exclusions

None

Business Rules

This measure is designed to monitor the time required for the CLEC and BellSouth interface system to obtain from BellSouth's legacy systems the information required to handle maintenance and repair functions. The clock starts on the date and time when the request is received on the BellSouth side of the interface and the clock stops when the response has been transmitted through that same point to the requester.

Note: The OSS Response Interval BellSouth Total Report is a combination of BellSouth Residence and Business Total.

Calculation

OSS Response Interval = (a - b)

- a = Query Response Date and Time
- b = Query Request Date and Time

Percent Response Interval (per category) = (c / d) X 100

- c = Number of Response Intervals in category "X"
- d = Number of Queries Submitted in the Reporting Period

where, "X" is <= 4, > 4 <= 10, <= 10, > 10, or > 30 seconds.

Report Structure

- Not CLEC Specific
- Not product/service specific
- Regional Level

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• CLEC Transaction Intervals	<ul style="list-style-type: none">• BellSouth Business and Residential Transactions Intervals

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Regional Level	<ul style="list-style-type: none">• Parity

Legacy System Access Times for M&R

System	BellSouth & CLEC	Count				
		<= 4	> 4 <= 10	<= 10	> 10	> 30
CRIS	x	x	x	x	x	x
DLETH	x	x	x	x	x	x
DLR	x	x	x	x	x	x
LMOS	x	x	x	x	x	x
LMOSupd	x	x	x	x	x	x
LNP	x	x	x	x	x	x
MARCH	x	x	x	x	x	x
OSPCM	x	x	x	x	x	x
Predictor	x	x	x	x	x	x
SOCS	x	x	x	x	x	x
NIW	x	x	x	x	x	x

OSS-4: Response Interval (Maintenance & Repair)

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

PO-1: Loop Makeup - Response Time – Manual

Definition

This report measures the average interval and percent within the interval from the submission of a Manual Loop Makeup Service Inquiry (LMUSI) to the distribution of Loop Makeup information back to the CLEC.

Exclusions

- Inquiries, which are submitted electronically.
- Designated Holidays are excluded from the interval calculation.
- Weekend hours from 5:00PM Friday until 8:00AM Monday are excluded from the interval calculation.
- Canceled Inquiries.

Business Rules

The CLEC Manual Loop Makeup Service Inquiry (LMUSI) process includes inquiries submitted via mail or FAX to BellSouth's Complex Resale Support Group (CRSG).

This measurement combines three intervals:

1. From receipt of the Service Inquiry for Loop Makeup to hand off to the Service Advocacy Center (SAC) for "Look-up."
2. From SAC start date to SAC complete date.
3. From SAC complete date to date the Complex Resale Support Group (CRSG) distributes loop makeup information back to the CLEC.

The "Receive Date" is defined as the date the Manual LMUSI is received by the CRSG. It is counted as day Zero. LMU "Return Date" is defined as the date the LMU information is sent back to the CLEC from BellSouth. The interval calculation is reset to Zero when a CLEC initiated change occurs on the Manual LMU request.

Note: The Loop Make Up Service Inquiry Form does not require the CLEC to furnish the type of Loop. The CLEC determines whether the loop makeup will support the type of service they wish to order or not and qualifies the loop. If the loop makeup will support the service, a firm order LSR is submitted by the CLEC.

Calculation

Response Interval = (a - b)

- a = Date and Time LMUSI returned to CLEC
- b = Date and Time the LMUSI is received

Average Interval = (c / d)

- c = Sum of all Response Intervals
- d = Total Number of LMUSIs received within the reporting period

Percent within interval = (e / f) X 100

- e = Total LMUSIs received within the interval
- f = Total Number of LMUSIs processed within the reporting period

Report Structure

- CLEC Aggregate
- CLEC Specific
- Geographic Scope
 - State
 - Region
- Interval for manual LMUs:
 - 0 - <= 1 day
 - >1 - <= 2 days
 - >2 - <= 3 days
 - 0 - <= 3 days
 - >3 - <= 6 days

>6 – <= 10 days

> 10 days

- Average Interval in days

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Total Number of Inquiries• SI Intervals• State and Region	<ul style="list-style-type: none">• Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Loops	Benchmark <ul style="list-style-type: none">• 95% <= 3 Business Days

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• Loops	Benchmark <ul style="list-style-type: none">• 95% <= 3 Business Days

PO-2: Loop Make Up - Response Time - Electronic

Definition

This report measures the average interval and the percent within the interval from the electronic submission of a Loop Makeup Service Inquiry (LMUSI) to the distribution of Loop Makeup information back to the CLEC.

Exclusions

- Manually submitted inquiries.
- Designated Holidays are excluded from the interval calculation.
- Canceled Requests.
- Scheduled OSS Maintenance.

Business Rules

The response interval starts when the CLEC's Mechanized Loop Makeup Service Inquiry (LMUSI) is submitted electronically through the Operational Support Systems interface, LENS, TAG or RoboTAG. It ends when BellSouth's Loop Facility Assignment and Control System (LFACS) responds electronically to the CLEC with the requested Loop Makeup data via LENS, TAG or RoboTAG Interfaces.

Note: The Loop Make Up Service Inquiry Form does not require the CLEC to furnish the type of Loop. The CLEC determines whether the loop makeup will support the type of service they wish to order or not and qualifies the loop. If the loop makeup will support the service, a firm order LSR is submitted by the CLEC. EDI is not a pre-ordering system, and, therefore, is not applicable in this measure.

Calculation

Response Interval = (a - b)

- a = Date and Time LMUSI returned to CLEC
- b = Date and Time the LMUSI is received

Average Interval = (c / d)

- c = Sum of all response intervals
- d = Total Number of LMUSIs received within the reporting period

Percent within interval = (e / f) X 100

- e = Total LMUSIs received within the interval
- f = Total Number of LMUSIs processed within the reporting period

Report Structure

- CLEC Aggregate
- CLEC Specific
- Geographic Scope
 - State
 - Region
- Interval for electronic LMUs:
 - 0 – <= 1 minute
 - >1 – <= 5 minutes
 - 0 - <= 5 minutes
 - > 5 – <= 8 minutes
 - > 8 – <= 15 minutes
 - > 15 minutes
- Average Interval in minutes

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Legacy Contract• Response Interval• Regional Scope	<ul style="list-style-type: none">• Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Loops	Benchmark <ul style="list-style-type: none">• 90% <= 5 Minutes (05/01/01)• 95% <= 1 Minute (08/01/01)

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• Loop	<ul style="list-style-type: none">• 90% <= 5 Minutes (05/01/01)• 95% <= 1 Minute (08/01/01)

Section 2: Ordering

O-1: Acknowledgement Message Timeliness

Definition

This measurement provides the response interval from the time an LSR or transmission (may contain multiple LSRs from one or more CLECs in multiple states) is electronically submitted via EDI or TAG respectively until an acknowledgement notice is sent by the system.

Exclusions

- Scheduled OSS Maintenance

Business Rules

The process includes EDI & TAG system functional acknowledgements for all messages/Local Service Requests (LSRs) which are electronically submitted by the CLEC. Users of EDI may package many LSRs into one transmission which will receive the acknowledgement message. EDI users may place multiple LSRs in one “envelope” requesting service in one or more states which will mask the identity of the state and CLEC. The start time is the receipt time of the message at BellSouth’s side of the interface (gateway). The end time is when the acknowledgement is transmitted by BellSouth at BellSouth’s side of the interface (gateway). If more than one CLEC uses the same ordering center (aggregator), an Acknowledgement Message will be returned to the “Aggregator”. However, BellSouth will not be able to determine which specific CLEC or state this message represented.

Calculation

Response Interval = (a - b)

- a = Date and Time Acknowledgement Notices returned to CLEC
- b = Date and Time messages/LSRs electronically submitted by the CLEC via EDI or TAG respectively

Average Response Interval = (c / d)

- c = Sum of all Response Intervals
- d = Total number of electronically submitted messages/LSRs received, from CLECs via EDI or TAG respectively, in the Reporting Period.

Reporting Structure

- CLEC Aggregate
- CLEC Specific/Aggregator
- Geographic Scope
 - Region
- Electronically Submitted LSRs
 - 0 – <= 10 minutes
 - >10 – <= 20 minutes
 - >20 – <= 30 minutes
 - 0 – <= 30 minutes
 - >30 – <= 45 minutes
 - >45 – <= 60 minutes
 - >60 – <= 120 minutes
 - >120 minutes
- Average interval for electronically submitted messages/LSRs in minutes

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Record of Functional Acknowledgements	<ul style="list-style-type: none">• Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• EDI• TAG	<ul style="list-style-type: none">• EDI<ul style="list-style-type: none">- 90% <= 30 minutes (05/01/01)- 95% <= 30 minutes (08/01/01)• TAG – 95% <= 30 minutes

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• EDI• TAG	<ul style="list-style-type: none">• EDI<ul style="list-style-type: none">- 90% <= 30 minutes (05/01/01)- 95% <= 30 minutes (08/01/01)• TAG – 95% <= 30 minutes

O-2: Acknowledgement Message Completeness

Definition

This measurement provides the percent of transmissions/LSRs received via EDI or TAG respectively, which are acknowledged electronically.

Exclusions

- Manually submitted LSRs
- Scheduled OSS Maintenance

Business Rules

EDI and TAG send Functional Acknowledgements for all transmissions/LSRs, which are electronically submitted by a CLEC. Users of EDI may package many LSRs from multiple states in one transmission. If more than one CLEC uses the same ordering center, an Acknowledgement Message will be returned to the "Aggregator", however, BellSouth will not be able to determine which specific CLEC this message represented. The Acknowledgement Message is returned prior to the determination of whether the transmission/LSR will be partially mechanized or fully mechanized.

Calculation

Acknowledgement Completeness = (a / b) X 100

- a = Total number of Functional Acknowledgements returned in the reporting period for transmissions/LSRs electronically submitted by EDI or TAG respectively
- b = Total number of electronically submitted transmissions/LSRs received in the reporting period by EDI or TAG respectively

Report Structure

- CLEC Aggregate
- CLEC Specific/Aggregator
- Geographic Scope
 - Region

Note: The Order calls for Mechanized, Partially Mechanized, and Totally Mechanized, however, the Acknowledgement message is generated before the system recognizes whether this electronic transmission will be partially or fully mechanized.

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Record of Functional Acknowledgements 	<ul style="list-style-type: none"> • Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • EDI • TAG 	<ul style="list-style-type: none"> • Benchmark: 100%

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• EDI• TAG	<ul style="list-style-type: none">• Benchmark: 100%

O-2: Acknowledgement Message Completeness

O-3: Percent Flow-Through Service Requests (Summary)

Definition

The percentage of Local Service Requests (LSR) and LNP Local Service Requests (LNP LSRs) submitted electronically via the CLEC mechanized ordering process that flow through and reach a status for a FOC to be issued, without manual intervention.

Exclusions

- Fatal Rejects
- Auto Clarification
- Manual Fallout
- CLEC System Fallout
- Scheduled OSS Maintenance

Business Rules

The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI and LENS), that flow through and reach a status for a FOC to be issued, without manual intervention. These LSRs can be divided into two classes of service: Business and Residence, and two types of service: Resale, and Unbundled Network Elements (UNE). The CLEC mechanized ordering process does not include LSRs which are submitted manually (for example, fax and courier) or are not designed to flow through (for example, Manual Fallout.)

Definitions:

Fatal Rejects: Errors that prevent an LSR, submitted electronically by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO/LNP Gateway will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO/LNP Gateway will reject the LSR and the CLEC will receive a Fatal Reject.

Auto-Clarification: Clarifications that occur due to invalid data within the LSR. LESOG/LAUTO will perform data validity checks to ensure the data within the LSR is correct and valid. For example, if the address on the LSR is not valid according to RSAG, or if the LNP is not available for the NPA NXXX requested, the CLEC will receive an Auto-Clarification.

Manual Fallout: Planned Fallout that occur by design. Certain LSRs are designed to fallout of the Mechanized Order Process due to their complexity. These LSRs are manually processed by the LCSC. When a CLEC submits an LSR, LESOG/LAUTO will determine if the LSR should be forwarded to LCSC for manual handling. Following are the categories for Manual Fallout:

- | | |
|---|--|
| 1. Complex* | 8. Denials-restore and conversion, or disconnect and conversion orders |
| 2. Special pricing plans | 9. Class of service invalid in certain states with some types of service |
| 3. Some Partial migrations | 10. Low volume such as activity type "T" (move) |
| 4. New telephone number not yet posted to BOCRIS | 11. More than 25 business lines, or more than 15 loops |
| 5. Pending order review required | 12. Transfer of calls option for the CLEC end users |
| 6. CSR inaccuracies such as invalid or missing CSR data in CRIS | 13. Directory Listings (Indentations and Captions) |
| 7. Expedites (requested by the CLEC) | |

*See LSR Flow-Through Matrix following O-6 for a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.

Total System Fallout: Errors that require manual review by the LSCS to determine if the error is caused by the CLEC, or is due to BellSouth system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC for clarification. If it is determined the error is BellSouth caused, the LCSC representative will correct the error, and the LSR will continue to be processed.

Z Status: LSRs that receive a supplemental LSR submission prior to final disposition of the original LSR.

Calculation

$$\text{Percent Flow Through} = a / [b - (c + d + e + f)] \times 100$$

- a = The total number of LSRs that flow through LESOG/LAUTO and reach a status for a FOC to be issued
- b = the number of LSRs passed from LEO/LNP Gateway to LESOG/LAUTO
- c = the number of LSRs that fall out for manual processing
- d = the number of LSRs that are returned to the CLEC for clarification
- e = the number of LSRs that contain errors made by CLECs
- f = the number of LSRs that receive a Z status

$$\text{Percent Achieved Flow Through} = a / [b - (c + d + e)] \times 100$$

- a = the number of LSRs that flow through LESOG/LAUTO and reach a status for a FOC to be issued
- b = the number of LSRs passed from LEO/LNP Gateway to LESOG/LAUTO
- c = the number of LSRs that are returned to the CLEC for clarification
- d = the number of LSRs that contain errors made by CLECs
- e = the number of LSRs that receive Z status

Report Structure

- CLEC Aggregate
 - Region

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Total Number of LSRs Received, by Interface, by CLEC <ul style="list-style-type: none"> - TAG - EDI - LENS • Total Number of Errors by Type, by CLEC <ul style="list-style-type: none"> - Fatal Rejects - Auto Clarification - CLEC Caused System Fallout • Total Number of Errors by Error Code • Total Fallout for Manual Processing 	<ul style="list-style-type: none"> • Report Month • Total Number of Errors By Type <ul style="list-style-type: none"> - Bellsouth System Error

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark ^a
• Residence	• Benchmark: 95%
• Business	• Benchmark: 90%
• UNE	• Benchmark: 85%
• LNP	• Benchmark: 85%

a. Benchmarks do not apply to the "Percent Achieved Flow Through."

SEEM Measure

SEEM Measure		
Yes	Tier I	
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark ^a
• Residence	• Benchmark: 95%
• Business	• Benchmark: 90%
• UNE	• Benchmark: 85%
• LNP	• Benchmark: 85%

a. Benchmarks do not apply to the "Percent Achieved Flow Through."

O-4: Percent Flow-Through Service Requests (Detail)

Definition

A detailed list, by CLEC, of the percentage of Local Service Requests (LSR) and LNP Local Service Requests (LNP LSRs) submitted electronically via the CLEC mechanized ordering process that flow through and reach a status for a FOC to be issued, without manual or human intervention.

Exclusions

- Fatal Rejects
- Auto Clarification
- Manual Fallout
- CLEC System Fallout
- Scheduled OSS Maintenance

Business Rules

The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), that flow through and reach a status for a FOC to be issued, without manual intervention. These LSRs can be divided into two classes of service: Business and Residence, and three types of service: Resale, and Unbundled Network Elements (UNE). The CLEC mechanized ordering process does not include LSRs, which are submitted manually (for example, fax and courier) or are not designed to flow through (for example, Manual Fallout.)

Definitions:

Fatal Rejects: Errors that prevent an LSR, submitted electronically by the CLEC, from being processed further. When an LSR is submitted by a CLEC, LEO/LNP Gateway will perform edit checks to ensure the data received is correctly formatted and complete. For example, if the PON field contains an invalid character, LEO/LNP Gateway will reject the LSR and the CLEC will receive a Fatal Reject.

Auto-Clarification: Clarifications that occur due to invalid data within the LSR. LESOG/LAUTO will perform data validity checks to ensure the data within the LSR is correct and valid. For example, if the address on the LSR is not valid according to RSAG, or if the LNP is not available for the NPA NXXX requested, the CLEC will receive an Auto-Clarification.

Manual Fallout: Planned Fallout that occur by design. Certain LSRs are designed to fallout of the Mechanized Order Process due to their complexity. These LSRs are manually processed by the LCSC. When a CLEC submits an LSR, LESOG/LAUTO will determine if the LSR should be forwarded to LCSC for manual handling. Following are the categories for Manual Fallout:

- | | |
|---|--|
| 1. Complex* | 8. Denials-restore and conversion, or disconnect and conversion orders |
| 2. Special pricing plans | 9. Class of service invalid in certain states with some types of service |
| 3. Some Partial migrations | 10. Low volume such as activity type "T" (move) |
| 4. New telephone number not yet posted to BOCRIS | 11. More than 25 business lines, or more than 15 loops |
| 5. Pending order review required | 12. Transfer of calls option for the CLEC end users |
| 6. CSR inaccuracies such as invalid or missing CSR data in CRIS | 13. Directory Listings (Indentations and Captions) |
| 7. Expedites (requested by the CLEC) | |

*See LSR Flow-Through Matrix following O-6 for a list of services, including complex services, and whether LSRs issued for the services are eligible to flow through.

Total System Fallout: Errors that require manual review by the LSCS to determine if the error is caused by the CLEC, or is due to BellSouth system functionality. If it is determined the error is caused by the CLEC, the LSR will be sent back to the CLEC for clarification. If it is determined the error is BellSouth caused, the LCSC representative will correct the error, and the LSR will continue to be processed.

Z Status: LSRs that receive a supplemental LSR submission prior to final disposition of the original LSR.

Calculation

Percent Flow Through = $a / [b - (c + d + e + f)] \times 100$

- a = The total number of LSRs that flow through LESOG/LAUTO and reach a status for a FOC to be issued
- b = the number of LSRs passed from LEO/LNP Gateway to LESOG/LAUTO
- c = the number of LSRs that fall out for manual processing
- d = the number of LSRs that are returned to the CLEC for clarification
- e = the number of LSRs that contain errors made by CLECs
- f = the number of LSRs that receive a Z status

Percent Achieved Flow Through = $a / [b - (c + d + e)] \times 100$

- a = the number of LSRs that flow through LESOG/LAUTO and reach a status for a FOC to be issued
- b = the number of LSRs passed from LEO/LNP Gateway to LESOG/LAUTO
- c = the number of LSRs that are returned to the CLEC for clarification
- d = the number of LSRs that contain errors made by CLECs
- e = the number of LSRs that receive Z status

Report Structure

Provides the flow through percentage for each CLEC (by alias designation) submitting LSRs through the CLEC mechanized ordering process. The report provides the following:

- CLEC (by alias designation)
- Number of fatal rejects
- Mechanized interface used
- Total mechanized LSRs
- Total manual fallout
- Number of auto clarifications returned to CLEC
- Number of validated LSRs
- Number of BellSouth caused fallout
- Number of CLEC caused fallout
- Number of Service Orders Issued
- Base calculation
- CLEC error excluded calculation

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Total Number of LSRs Received, by Interface, by CLEC <ul style="list-style-type: none"> - TAG - EDI - LENS • Total Number of Errors by Type, by CLEC <ul style="list-style-type: none"> - Fatal Rejects - Auto Clarification - CLEC Errors • Total Number of Errors by Error Code • Total Fallout for Manual Processing 	<ul style="list-style-type: none"> • Report Month • Total Number of Errors by Type <ul style="list-style-type: none"> - BellSouth System Error

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark ^a
<ul style="list-style-type: none"> • Residence 	<ul style="list-style-type: none"> • Benchmark: 95%

SQM Level of Disaggregation	SQM Analog/Benchmark ^a
• Business	• Benchmark: 90%
• UNE	• Benchmark: 85%
• LNP	• Benchmark: 85%

a. Benchmarks do not apply to the "Percent Achieved Flow Through."

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark ^a
• Residence	• Benchmark: 95%
• Business	• Benchmark: 90%
• UNE	• Benchmark: 85%
• LNP	• Benchmark: 85%

a. Benchmarks do not apply to the "Percent Achieved Flow Through."

O-5: Flow-Through Error Analysis

Definition

An analysis of each error type (by error code) that was experienced by the LSRs that did not flow through or reached a status for a FOC to be issued.

Exclusions

Each Error Analysis is error code specific, therefore exclusions are not applicable.

Business Rules

The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), that flow through and reach a status for a FOC to be issued. The CLEC mechanized ordering process does not include LSRs which are submitted manually (for example, fax and courier).

Calculation

Total for each error type.

Report Structure

Provides an analysis of each error type (by error code). The report is in descending order by count of each error code and provides the following:

- Error Type (by error code)
- Count of each error type
- Percent of each error type
- Cumulative percent
- Error Description
- CLEC Caused Count of each error code
- Percent of aggregate by CLEC caused count
- Percent of CLEC caused count
- BellSouth Caused Count of each error code
- Percent of aggregate by BellSouth caused count
- Percent of BellSouth by BellSouth caused count

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Total Number of LSRs Received• Total Number of Errors by Type (by error code)<ul style="list-style-type: none">- CLEC Caused Error	<ul style="list-style-type: none">• Report Month• Total Number of Errors by Type (by error code)<ul style="list-style-type: none">- BellSouth System Error

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Not Applicable	<ul style="list-style-type: none">• Not Applicable

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

O-6: CLEC LSR Information

Definition

A list with the flow through activity of LSRs by CC, PON and Ver, issued by each CLEC during the report period.

Exclusions

- Fatal Rejects
- LSRs submitted manually

Business Rules

The CLEC mechanized ordering process includes all LSRs, including supplements (subsequent versions) which are submitted through one of the three gateway interfaces (TAG, EDI, and LENS), that flow through and reach a status for a FOC to be issued. The CLEC mechanized ordering process does not include LSRs which are submitted manually (for example, fax and courier).

Calculation

Not Applicable

Report Structure

Provides a list with the flow through activity of LSRs by CC, PON and Ver, issued by each CLEC during the report period with an explanation of the of the columns and content. This report is available on a CLEC specific basis. The report provides the following for each LSR.

- CC
- PON
- Ver
- Timestamp
- Type
- Err #
- Note or Error Description

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Record of LSRs Received by CC, PON and Ver• Record of Timestamp, Type, Err # and Note or Error Description for each LSR by CC, PON and Ver	<ul style="list-style-type: none">• Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Not Applicable	<ul style="list-style-type: none">• Not Applicable

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

LSR Flow Through Matrix

LSR Flow Through Matrix

Product	Product Type	Reqtype	ACT Type	F/T ³	Complex Service	Complex Order	Planned Fallout For Manual Handling ¹	EDI	TAG ²	LENS ⁴
2 wire analog DID trunk port	U,C	A	N,T	No	UNE	Yes	NA	N	N	N
2 wire analog port	U	A	N,T	No	UNE	No	Yes	Y	Y	N
2 wire ISDN digital line	U,C	A	N,T	No	UNE	Yes	NA	N	N	N
2 wire ISDN digital loop	U,C	A	N,T	Yes	UNE	Yes	No	Y	Y	N
3 Way Calling	R,B	E,M	N,C,T,V,W	Yes	No	No	No	Y	Y	Y
4 wire analog voice grade loop	U,C	A	N,T	Yes	UNE	Yes	No	Y	Y	N
4 wire DSO & PRI digital loop	U,C	A	N,T	No	UNE	Yes	NA	N	N	N
4 wire DS1 & PRI digital loop	U,C	A	N,T	No	UNE	Yes	NA	N	N	N
4 wire ISDN DSI digital trunk ports	U,C	A	N,T	No	UNE	Yes	NA	N	N	N
Accupulse	C	E	N,C,T,V,W	No	Yes	Yes	NA	N	N	N
ADSL	R,B,C	E	V,W	No	UNE	No	No	Y	Y	N
Area Plus	R,B	E,M	N,C,T,V,W	Yes	No	No	No	Y	Y	Y
Basic Rate ISDN	U,C	A	N,T	No	Yes	Yes	Yes	Y	Y	N
Basic Rate ISDN 2 Wire	C	E	C, D,T,V,W	No	Yes	Yes	Yes	Y	Y	N
Basic Rate ISDN 2 Wire	C	E	N,T	No	Yes	Yes	N/A	N	N	N
Basic Rate ISDN 2 Wire UNE P	C	M	N,C,D,V	No	YES	Yes	N/A	N	N	N
Analog Data/Private Line	C	E	N, C, T, V, W, D, P, Q	No	Yes	Yes	N/A	N	N	N
Call Block	R,B	E,B,M	N,C,T,V,W	Yes	No	No	No	Y	Y	Y
Call Forwarding	R,B	E,B,M	N,C,T,V,W	Yes	No	No	No	Y	Y	Y
Call Return	R,B	E,B,M	N,C,T,V,W	Yes	No	No	No	Y	Y	Y
Call Selector	R,B	E,B,M	N,C,T,V,W	Yes	No	No	No	Y	Y	Y
Call Tracing	R,B	E,B,M	N,C,T,V,W	Yes	No	No	No	Y	Y	Y
Call Waiting	R,B	E,B,M	N,C,T,V,W	Yes	No	No	No	Y	Y	Y
Call Waiting Deluxe	R,B	E,B,M	N,C,T,V,W	Yes	No	No	No	Y	Y	Y
Caller ID	R,B	E,B,M	N,C,T,V,W	Yes	No	No	No	Y	Y	Y
CENTREX	C	P	V,P	No	Yes	Yes	NA	N	N	N
DID ACT W	C	N	W	No	Yes	Yes	Yes	Y	Y	Y
Digital Data Transport	U	E	N,C,T,V,W	No	UNE	Yes	NA	N	N	N
Directory Listing Indentions	B,U	B,C,E,F, J,M,N	N,C,T,R,V,W,P,Q	No	No	No	Yes	Y	Y	Y
Directory Listings Captions	R,B,U	B,C,E,F, J,M,N	N,C,T,R,V,W,P,Q	No	No	Yes	Yes	Y	Y	Y
Directory Listings (simple)	R,B,U	B,C,E,F, J,M,N	N,C,T,R,V,W,P,Q	Yes	No	No	No	Y	Y	Y
DS3	U	A,M	N,C,V	No	UNE	Yes	NA	N	N	N
DS1Loop	U	A,M	N,C,V	Yes	UNE	Yes	No	Y	Y	N
DSO Loop	U	A, B	N,C,D,T,V	Yes	UNE	Yes	No	Y	Y	N
Enhanced Caller ID	R,B	E,M	C,D,N,T,V,W	Yes	No	No	No	Y	Y	Y

Product	Product Type	Rectype	ACT Type	F/T ³	Complex Service	Complex Order	Planned Fallout For Manual Handling ¹	EDI	TAG ²	LENS ⁴
ESSX	C	P	C,D,T,V,S,B,W,L,P,Q	No	Yes	Yes	NA	N	N	N
Flat Rate/Business	B	E, M	C,D,N,T,V,W	Yes	No	No	No	Y	Y	Y
Flat Rate/Residence	R	E, M	C,D,N,T,V,W	Yes	No	No	No	Y	Y	Y
FLEXSERV	C	E	N,C,D,T,V,W,P,Q	No	Yes	Yes	NA	N	N	N
Frame Relay	C	E	N,C,D,V,W	No	Yes	Yes	NA	N	N	N
FX	C	E	N,C,D,T,V,W,P,Q	No	Yes	Yes	NA	N	N	N
Ga. Community Calling	R,B	E, M	C,D,N,T,V,W	Yes	No	No	No	Y	Y	Y
HDSL	U	A	N,C,D	Yes	UNE	No	No	Y	Y	N
Hunting MLH	R,B	E, M	C,D,N,T,V,W	No	C/S4	C/S	Yes	Y	Y	N
Hunting Series Completion	R,B	E, M	C,D,N,T,V,W	Yes	C/S	C/S	No	Y	Y	Y
INP to LNP Conversion	U	C	C	No	UNE	Yes	Yes	Y	Y	N
LightGate	C	E	N,C,D,T,V,W,P,Q	No	Yes	Yes	NA	N	N	N
Line Sharing	U	A	C,D	Yes	UNE	No	No	Y	Y	Y
Local Number Portability	U	C	C,D,P,V,Q	Yes	UNE	Yes	No	Y	Y	N
LNP With Complex Listing	C	C	P,V,Q,W	No	UNE	Yes	Yes	Y	Y	N
LNP with Partial Migration	U	C	D,P,V,Q	No	UNE	Yes	Yes	Y	Y	N
LNP with Complex Services	C	C	P,V,Q,W	No	UNE	Yes	Yes	Y	Y	N
Loop+INP	U	B	D,P,V,Q	Yes	UNE	No	No	Y	Y	N
Loop+LNP	U	B	C,D,N,V	Yes	UNE	No	No	Y	Y	N
Measured Rate/Bus	R,B	E,M	C,D,T,N,V,W	Yes	No	No	No	Y	Y	Y
Measured Rate/Res	R,B	E,M	C,D,T,N,V,W	Yes	No	No	No	Y	Y	Y
Megalink	C	E	N,V,W,T,D,C,P,Q	No	Yes	Yes	NA	N	N	N
Megalink-T1	C	E,M	N,V,W,T,D,C,P,Q	No	Yes	Yes	NA	N	N	N
Memory Call	R,B	E, M	C,D,N,T,V,W	Yes	No	No	No	Y	Y	Y
Memory Call Ans. Svc.	R,B	E, M	C,D,N,T,V,W	Yes	No	No	No	Y	Y	Y
Multiserv	C	P	N,C,D,T,V,S,B,W,L,P,Q	No	Yes	Yes	NA	N	N	N
Native Mode LAN Interconnection (NMLI)	C	E	N,C,D,V,W	No	Yes	Yes	NA	N	N	N
Off-Prem Stations	C	E	N,C,D,V,W,T,P,Q	No	Yes	Yes	NA	N	N	N
Optional Calling Plan	R,B	E, M	N	Yes	No	No	No	Y	Y	Y
Package/Complete Choice and Area Plus	R,B	E, M	N,T,C,V,W	Yes	No	No	No	Y	Y	Y
Pathlink Primary Rate ISDN	C	E	N,C,D,T,V,W,P,Q	No	Yes	Yes	NA	N	N	N
Pay Phone Provider	B	E	C,D,T,N,V,W	No	No	No	NA	N	N	N
PBX Standalone Port	C	F	N,C,D	No	Yes	Yes	Yes	Y	Y	N
PBX Trunks	R,B	E	N,C,D,V,W,T,P,Q	No	Yes	Yes	Yes	Y	Y	N
Port/Loop PBX	U	M	A,C,D,V	No	No	No	Yes	Y	Y	N
Port/Loop Simple	U	M	A,C,D,V	Yes	No	No	Yes	Y	Y	Y
Preferred Call Forward	R,B,U	E	C,D,T,N,V,W	Yes	No	No	No	Y	Y	Y
RCF Basic	R,B	E	N,D,W,T,F	Yes	No	No	No	Y	Y	Y

LSR Flow Through Matrix

Product	Product Type	Rectype	ACT Type	F/T ³	Complex Service	Complex Order	Planned Fallout For Manual Handling ¹	EDI	TAG ²	LENS ⁴
Remote Access to CF	R,B	E,M	C,D,T,N,V,W	Yes	No	No	No	Y	Y	Y
Repeat Dialing	R,B	E,M	C,D,T,N,V,W	Yes	No	No	No	Y	Y	Y
Ringmaster	R,B	E,M	C,D,T,N,V,W	Yes	No	No	No	Y	Y	Y
Smartpath	R,B	E	C,D,T,N,V,W	No	Yes	Yes	NA	N	N	N
SmartRING	C	E	N,D,C,V,W	No	Yes	Yes	NA	N	N	N
Speed Calling	R,B	E	C,D,T,N,V,W	Yes	No	No	No	Y	Y	Y
Synchronet	C	E	N	Yes	Yes	Yes	Yes	Y	Y	N
Tie Lines	C	E	N,C,D,V,W,T,P,Q	No	Yes	Yes	NA	N	N	N
Touchtone	R,B	E	C,D,T,N,V,W	Yes	No	No	No	Y	Y	Y
Unbundled Loop-Analog 2W, SL1, SL2	U	A,B	C,D,T,N,V,W	Yes	UNE	No	No	Y	Y	Y
WATS	R,B	E	W,D	No	Yes	Yes	NA	N	N	N
XDSL	C,U	A,B	N,T,C,V,D	Yes	UNE	No	No	Y	Y	N
XDSL Extended LOOP	C,U	A,B	N,T,C,V,D	No	UNE	Yes	NA	N	N	N
Collect Call Block	R,B	E	N,T,C,V,W,D	Yes	No	No	No	Y	Y	Y
900 Call Block	R,B	E	N,T,C,V,W,D	Yes	No	No	No	Y	Y	Y
3rd Party Call Block	R,B	E	N,T,C,V,W,D	Yes	No	No	No	Y	Y	Y
Three Way Call Block	R,B	E	N,T,C,V,W,D	Yes	No	No	No	Y	Y	Y
PIC/LPIC Change	R,B	E	T,C,V	Yes	No	No	No	Y	Y	Y
PIC/LPIC Freeze	R,B	E	N,T,C,V	Yes	No	No	No	Y	Y	Y

Note¹: Planned Fallout for Manual Handling denotes those services that are electronically submitted and are not intended to flow through due to the complexity of the service.

Note²: The TAG column includes those LSRs submitted via Robo TAG.

Note³: For all services that indicate 'No' for flow-through, the following reasons, in addition to errors or complex services, also prompt manual handling: Expedites from CLECs, special pricing plans, denials restore and conversion or disconnect and conversion both required, partial migrations (although conversions-as-is flow through for issue 9), class of service invalid in certain states with some TOS e.g. government, or cannot be changed when changing main TN on C activity, low volume e.g. activity type T=move, pending order review required, more than 25 business lines, CSR inaccuracies such as invalid or missing CSR data in CRIS, Directory listings – Indentions, Directory listings – Captions, transfer of calls option for CLEC end user – new TN not yet posted to BOCRIS. Many are unique to the CLEC environment.

Note⁴: Services with C/S in the Complex Service and/or the Complex Order columns can be either complex or simple.

Note⁵: EELs are manually ordered.

Note⁶: LSRs submitted for Resale Products and Services for which there is a temporary promotion or discount plan will be processed identically to those LSRs ordering the same Products or Services without a promotion or discount plan.

O-7: Percent Rejected Service Requests

Definition

Percent Rejected Service Request is the percent of total Local Service Requests (LSRs) received which are rejected due to error or omission. An LSR is considered valid when it is submitted by the CLEC and passes edit checks to insure the data received is correctly formatted and complete.

Exclusions

- Service Requests canceled by the CLEC prior to being rejected/clarified.
- Scheduled OSS Maintenance

Business Rules

Fully Mechanized: An LSR is considered “rejected” when it is submitted electronically but does not pass LEO edit checks in the ordering systems (EDI, LENS, TAG, LEO, LESOG) and is returned to the CLEC without manual intervention. There are two types of “Rejects” in the Mechanized category:

A **Fatal Reject** occurs when a CLEC attempts to electronically submit an LSR but required fields are either not populated or incorrectly populated and the request is returned to the CLEC before it is considered a valid LSR.

Fatal rejects are reported in a separate column, and for informational purposes ONLY. Fatal rejects are excluded from the calculation of the percent of total LSRs rejected or the total number of rejected LSRs.

An **Auto Clarification** occurs when a valid LSR is electronically submitted but rejected from LESOG because it does not pass further edit checks for order accuracy.

Partially Mechanized: A valid LSR, which is electronically submitted (via EDI, LENS, TAG) but cannot be processed electronically and “falls out” for manual handling. It is then put into “clarification” and sent back (rejected) to the CLEC.

Total Mechanized: Combination of Fully Mechanized and Partially Mechanized LSRs electronically submitted by the CLEC.

Non-Mechanized: LSRs which are faxed or mailed to the LCSC for processing and “clarified” (rejected) back to the CLEC by the BellSouth service representative.

Interconnection Trunks: Interconnection Trunks are ordered on Access Service Requests (ASRs). ASRs are submitted to and processed by the Interconnection Purchasing Center (IPC). Trunk data is reported separately.

Calculation

Percent Rejected Service Requests = $(a / b) \times 100$

- a = Total Number of Rejected Service Requests in the Reporting Period
- b = Total Number of Service Requests Received in the Reporting Period

Report Structure

- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized
- CLEC Specific
- CLEC Aggregate
- Geographic Scope
 - State
 - Region
- Product Specific Percent Rejected
- Total Percent Rejected

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> Report Month Total Number of LSRs Total Number of Rejects State and Region Total Number of ASRs (Trunks) 	<ul style="list-style-type: none"> Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Mechanized, Partially Mechanized and Non-Mechanized <ul style="list-style-type: none"> Resale - Residence Resale - Business Resale – Design (Special) Resale PBX Resale Centrex Resale ISDN LNP (Standalone) INP (Standalone) 2W Analog Loop Design 2W Analog Loop Non-Design 2W Analog Loop With INP Design 2W Analog Loop With INP Non-Design 2W Analog Loop With LNP Design 2W Analog Loop With LNP Non-Design UNE Loop + Port Combinations Switch Ports UNE Combination Other UNE xDSL (ADSL, HDSL, UCL) Line Sharing UNE ISDN Loop UNE Other Design UNE Other Non-Design Local Interoffice Transport Local Interconnection Trunks 	<ul style="list-style-type: none"> Diagnostic

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none"> Not Applicable 	<ul style="list-style-type: none"> Not Applicable

O-8: Reject Interval

Definition

Reject Interval is the average reject time from receipt of an LSR to the distribution of a Reject. An LSR is considered valid when it is submitted by the CLEC and passes edit checks to insure the data received is correctly formatted and complete.

Exclusions

- Service Requests canceled by CLEC prior to being rejected/clarified
- Designated Holidays are excluded from the interval calculation
- LSRs which are identified and classified as “Projects”
- The following hours for Partially mechanized and Non-mechanized LSRs are excluded from the interval calculation:

Residence Resale Group – Monday through Saturday 7:00PM until 7:00AM
From 7:00 PM Saturday until 7:00 AM Monday

Business Resale, Complex, UNE Groups – Monday through Friday 6:00PM until 8:00AM
From 6:00 PM Friday until 8:00 AM Monday.

The hours excluded will be altered to reflect changes in the Center operating hours. The LCSC will accept faxed LSRs only during posted hours of operation.

The interval will be the amount of time accrued from receipt of the LSR until normal closing of the center if an LSR is worked using overtime hours.

In the case of a Partially Mechanized LSR received and worked after normal business hours, the interval will be set at one (1) minute.

- Scheduled OSS Maintenance

Business Rules

Fully Mechanized: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS or TAG) until the LSR is rejected (date and time stamp or reject in EDI, TAG or LENS). Auto Clarifications are considered in the Fully Mechanized category.

Partially Mechanized: The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS or TAG) until it falls out for manual handling. The stop time on partially mechanized LSRs is when the LCSC Service Representative clarifies the LSR back to the CLEC via LENS, EDI, or TAG.

Total Mechanized: Combination of Fully Mechanized and Partially Mechanized LSRs which are electronically submitted by the CLEC.

Non-Mechanized: The elapsed time from receipt of a valid LSR (date and time stamp of FAX or date and time mailed LSR is received in the LCSC) until notice of the reject (clarification) is returned to the CLEC via LON.

Interconnection Trunks: Interconnection Trunks are ordered on Access Service Requests (ASRs). ASRs are submitted to and processed by the Local Interconnection Service Center (LISC). Trunk data is reported separately. All interconnection trunks are counted in the non-mechanized category.

Calculation

Reject Interval = (a - b)

- a = Date and Time of Service Request Rejection
- b = Date and Time of Service Request Receipt

Average Reject Interval = (c / d)

- c = Sum of all Reject Intervals
- d = Number of Service Requests Rejected in Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate

- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized
- Geographic Scope
 - State
 - Region
- Mechanized:
 - 0 - <= 4 minutes
 - >4 - <= 8 minutes
 - >8 - <= 12 minutes
 - >12 - <= 60 minutes
 - 0 - <= 1 hour
 - >1 - <= 4 hours
 - >4 - <= 8 hours
 - >8 - <= 12 hours
 - >12 - <= 16 hours
 - >16 - <= 20 hours
 - >20 - <= 24 hours
 - >24 hours
- Partially Mechanized:
 - 0 - <= 1 hour
 - >1 - <= 4 hours
 - >4 - <= 8 hours
 - >8 - <= 10 hours
 - 0 - <= 10 hours
 - >10 - <= 18 hours
 - 0 - <= 18 hours
 - >18 - <= 24 hours
 - >24 hours
- Non-mechanized:
 - 0 - <= 1 hour
 - >1 - <= 4 hours
 - >4 - <= 8 hours
 - >8 - <= 12 hours
 - >12 - <= 16 hours
 - >16 - <= 20 hours
 - >20 - <= 24 hours
 - 0 - <= 24 hours
 - > 24 hours
- Trunks:
 - <= 4 days
 - >4 - <= 8 days
 - >8 - <= 12 days
 - >12 - <= 14 days
 - >14 - <= 20 days
 - >20 days

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
Report Month <ul style="list-style-type: none"> • Reject Interval • Total Number of LSRs • Total Number of Rejects • State and Region • Total Number of ASRs (Trunks) 	<ul style="list-style-type: none"> • Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • Resale - Residence • Resale - Business • Resale - Design (Special) • Resale PBX • Resale Centrex • Resale ISDN • LNP (Standalone) • INP (Standalone) • 2W Analog Loop Design • 2W Analog Loop Non-Design • 2W Analog Loop With INP Design • 2W Analog Loop With INP Non-Design • 2W Analog Loop With LNP Design • 2W Analog Loop With LNP Non-Design • UNE Loop + Port Combinations • Switch Ports • UNE Combination Other • UNE xDSL (ADSL, HDSL, UCL) • Line Sharing • UNE ISDN Loops • UNE Other Non-Design • Local Interoffice Transport • UNE Other Design 	<ul style="list-style-type: none"> • Mechanized: <ul style="list-style-type: none"> - 97% <= 1 Hour • Partially Mechanized: <ul style="list-style-type: none"> - 85% <= 24 hours - 85% <= 18 Hours (05/01/01) - 85% <= 10 Hours (08/01/01) • Non-Mechanized: - 85% <= 24 hours
<ul style="list-style-type: none"> • Local Interconnection Trunks 	<ul style="list-style-type: none"> • Trunks: - 85% <= 4 Days

O-8: Reject Interval

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none"> • Fully Mechanized 	<ul style="list-style-type: none"> • 97% <= 1 Hour
<ul style="list-style-type: none"> • Partially Mechanized 	<ul style="list-style-type: none"> • 85% <= 24 Hours • 85% <= 18 Hours (05/01/01) • 85% <= 10 Hours (08/01/01)
<ul style="list-style-type: none"> • Non-Mechanized 	<ul style="list-style-type: none"> • 85% <= 24 Hours

O-9: Firm Order Confirmation Timeliness

Definition

Interval for Return of a Firm Order Confirmation (FOC Interval) is the average response time from receipt of valid LSR to distribution of a Firm Order Confirmation.

Exclusions

- Rejected LSRs
- Designated Holidays are excluded from the interval calculation
- LSRs which are identified and classified as “Projects”
- The following hours for Partially Mechanized and Non-mechanized LSRs are excluded from the interval calculation:

Residence Resale Group – Monday through Saturday 7:00PM until 7:00AM
From 7:00 PM Saturday until 7:00 AM Monday.

Business Resale, Complex, UNE Groups – Monday through Friday 6:00PM until 8:00AM
From 6:00 PM Friday until 8:00 AM Monday.

The hours excluded will be altered to reflect changes in the Center operating hours. The LCSC will accept faxed LSRs only during posted hours of operation.

The interval will be the amount of time accrued from receipt of the LSR until normal closing of the center if an LSR is worked using overtime hours.

In the case of a Partially Mechanized LSR received and worked after normal business hours, the interval will be set at one (1) minute.

- Scheduled OSS Maintenance

Business Rules

- **Fully Mechanized:** The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS or TAG) until the LSR is processed, appropriate service orders are generated and a Firm Order Confirmation is returned to the CLEC via EDI, LENS or TAG.
- **Partially Mechanized:** The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS, or TAG) which falls out for manual handling until appropriate service orders are issued by a BellSouth service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS and a Firm Order Confirmation is returned to the CLEC via EDI, LENS, or TAG.
- **Total Mechanized:** Combination of Fully Mechanized and Partially Mechanized LSRs which are electronically submitted by the CLEC.
- **Non-Mechanized:** The elapsed time from receipt of a valid paper LSR (date and time stamp of FAX or date and time paper LSRs received in LCSC) until appropriate service orders are issued by a BellSouth service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS and a Firm Order Confirmation is sent to the CLEC via LON.
- **Interconnection Trunks:** Interconnection Trunks are ordered on Access Service Requests (ASRs). ASRs are submitted to and processed by the Local Interconnection Service Center (LISC). Trunk data is reported separately.

Calculation

Firm Order Confirmation Interval = (a - b)

- a = Date & Time of Firm Order Confirmation
- b = Date & Time of Service Request Receipt)

Average FOC Interval = (c / d)

- c = Sum of all FOC Intervals
- d = Total Number of Service Requests Confirmed in Reporting Period

FOC Interval Distribution (for each interval) = (e / f) X 100

- e = Service Requests Confirmed in interval
- f = Total Service Requests Confirmed in the Reporting Period

Report Structure

- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized
 - CLEC Specific
 - CLEC Aggregate
- Geographic Scope
 - State
 - Region
- Fully Mechanized:
 - 0 - <= 15 minutes
 - >15 - <= 30 minutes
 - >30 - <= 45 minutes
 - >45 - <= 60 minutes
 - >60 - <= 90 minutes
 - >90 - <= 120 minutes
 - >120 - <= 180 minutes
 - 0 - <= 3 hours
 - >3 - <= 6 hours
 - >6 - <= 12 hours
 - >12 - <= 24 hours
 - >24 - <= 48 hours
 - >48 hours
- Partially Mechanized:
 - 0 - <= 4 hours
 - >4 - <= 8 hours
 - >8 - <= 10 hours
 - 0 - <= 10 hours
 - >10 - <= 18 hours
 - 0 - <= 18 hours
 - >18 - <= 24 hours
 - 0 - <= 24 hours
 - >24 - <= 48 hours
 - >48 hours
- Non-Mechanized:
 - 0 - <= 4 hours
 - >4 - <= 8 hours
 - >8 - <= 12 hours
 - >12 - <= 16 hours
 - >16 - <= 20 hours
 - >20 - <= 24 hours
 - >24 - <= 36 hours
 - 0 - <= 36 hours
 - >36 - <= 48 hours
 - >48 hours
- Trunks:
 - 0 - <= 5 days
 - >5 - <= 10 days
 - 0 - <= 10 days
 - >10 - <= 15 days
 - >15 - <= 20 days
 - >20 days

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> Report Month Interval for FOC Total Number of LSRs State and Region Total Number of ASRs (Trunks) 	<ul style="list-style-type: none"> Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> Resale – Residence Resale – Business Resale – Design (Special) Resale PBX Resale Centrex Resale ISDN LNP (Standalone) INP(Standalone) 2W Analog Loop Design 2W Analog Loop Non-Design 2W Analog Loop With INP Design 2W Analog Loop With INP Non-Design 2W Analog Loop With LNP Design 2W Analog Loop With LNP Non-Design UNE Loop + Port Combinations Switch Ports UNE Combination Other UNE xDSL (ADSL, HDSL, UCL) Line Sharing UNE ISDN Loops UNE Other Design UNE Other Non-Design Local Interoffice Transport 	<ul style="list-style-type: none"> Mechanized: - 95% <= 3 Hours Partially Mechanized: <ul style="list-style-type: none"> - 85% <= 24 Hours - 85% <= 18 Hours (05/01/01) - 85% <= 10 Hours (08/01/01) Non-mechanized: - 85% <= 36 Hours
<ul style="list-style-type: none"> Local Interconnection Trunks 	<ul style="list-style-type: none"> Trunks: - 95% <= 10 Days

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none"> Fully Mechanized 	<ul style="list-style-type: none"> 95% <= 3 Hours
<ul style="list-style-type: none"> Partially Mechanized 	<ul style="list-style-type: none"> 85% <= 24 Hours 85% <= 18 Hours (05/01/01) 85% <= 10 Hours (08/01/01)

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• Non-Mechanized	<ul style="list-style-type: none">• 85% <= 36 Hours
<ul style="list-style-type: none">• IC Trunks	<ul style="list-style-type: none">• 95% <= 10 Days

O-10: Service Inquiry with LSR Firm Order Confirmation (FOC) Response Time Manual¹

Definition

This report measures the interval and the percent within the interval from the submission of a Service Inquiry (SI) with Firm Order LSR to the distribution of a Firm Order Confirmation (FOC).

Exclusions

- Designated Holidays are excluded from the interval calculation
- Weekend hours from 5:00PM Friday until 8:00AM Monday are excluded from the interval calculation of the Service Inquiry
- Canceled Requests
- Electronically Submitted Requests
- Scheduled OSS Maintenance

Business Rules

This measurement combines four intervals:

1. From receipt of Service Inquiry with LSR to hand off to the Service Advocacy Center (SAC) for Loop 'Look-up'.
2. From SAC start date to SAC complete date.
3. From SAC complete date to the Complex Resale Support Group (CRSG) complete date with hand off to LCSC.
4. From receipt of SI/LSR in the LCSC to Firm Order Confirmation.

Calculation

FOC Timeliness Interval = (a - b)

- a = Date and Time Firm Order Confirmation (FOC) for SI with LSR returned to CLEC
- b = Date and Time SI with LSR received

Average Interval = (c / d)

- c = Sum of all FOC Timeliness Intervals
- d = Total number of SIs with LSRs received in the reporting period

Percent Within Interval = (e / f) X 100

- e = Total number of Service Inquiries with LSRs received by the CRSG to distribution of FOC by the Local Carrier Service Center (LCSC)
- f = Total number of Service Inquiries with LSRs received in the reporting period

Report Structure

- CLEC Aggregate
- CLEC Specific
- Geographic Scope
 - State
 - Region
- Intervals
 - 0 – <= 3 days
 - >3 – <= 5 days
 - 0 – <= 5 days
 - >5 – <= 7 days
 - >7 – <= 10 days
 - >10 – <= 15 days
 - >15 days
- Average Interval measured in days

1. See O-9 for FOC Timeliness

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Total Number of Requests• SI Intervals• State and Region	<ul style="list-style-type: none">• Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• xDSL (includes UNE unbundled ADSL, HDSL and UNE Unbundled Copper Loops)• Unbundled Interoffice Transport	<ul style="list-style-type: none">• 95% Returned <= 5 Business days

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• Not Applicable	<ul style="list-style-type: none">• Not Applicable

O-11: Firm Order Confirmation and Reject Response Completeness

Definition

A response is expected from BellSouth for every Local Service Request transaction (version). More than one response or differing responses per transaction is not expected. Firm Order Confirmation and Reject Response Completeness is the corresponding number of Local Service Requests received to the combination of Firm Order Confirmation and Reject Responses.

Exclusions

- Service Requests canceled by the CLEC prior to FOC or Rejected/Clarified
- Non-Mechanized LSRs
- Scheduled OSS Maintenance

Business Rules

Mechanized – The number of FOCs or Auto Clarifications sent to the CLEC from LENS, EDI, TAG in response to electronically submitted LSRs (date and time stamp in LENS, EDI, TAG).

Partially Mechanized – The number of FOCs or Rejects sent to the CLEC from LENS, EDI, TAG in response to electronically submitted LSRs (date and time stamp in LENS, EDI, TAG), which fall out for manual handling by the LCSC personnel.

Total Mechanized – The number of the combination of Fully Mechanized and Partially Mechanized LSRs

Non-Mechanized – The number of FOCs or Rejects sent to the CLEC via FAX Server in response to manually submitted LSRs (date and time stamp in FAX Server).

Note: Manual (Non-Mechanized) LSRs have no version control by the very nature of the manual process, therefore, non-mechanized LSRs are not captured by this report.

For CLEC Results:

Firm Order Confirmation and Reject Response Completeness is determined in two dimensions:

Percent responses is determined by computing the number of Firm Order Confirmations and Rejects transmitted by BellSouth and dividing by the number of Local Service Requests (all versions) received in the reporting period.

Percent of multiple responses is determined by computing the number of Local Service Request unique versions receiving more than one Firm Order Confirmation, Reject or the combination of the two and dividing by the number of Local Service Requests (all versions) received in the reporting period.

Calculation

Single FOC/Reject Response Expected

Firm Order Confirmation / Reject Response Completeness = $(a / b) \times 100$

- a = Total Number of Service Requests for which a Firm Order Confirmation or Reject is Sent
- b = Total Number of Service Requests Received in the Report Period

Multiple or Differing FOC / Reject Responses Not Expected

Response Completeness = $[(a + b) / c] \times 100$

- a = Total Number of Firm Order Confirmations Per LSR Version
- b = Total Number of Reject Responses Per LSR Version
- c = Total Number of Service Requests (All Versions) Received in the Reporting Period

Report Structure

Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized

- State and Region
- CLEC Specific
- CLEC Aggregate
- BellSouth Specific

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
Report Month <ul style="list-style-type: none"> Reject Interval Total Number of LSRs Total Number of Rejects 	<ul style="list-style-type: none"> Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> Resale Residence Resale Business Resale Design Resale PBX Resale Centrex Resale ISDN LNP (Standalone) INP (Standalone) 2W Analog Loop Design 2W Analog Loop Non - Design 2W Analog Loop With INP Design 2W Analog Loop With INP Non - Design 2W Analog Loop With LNP Design 2W Analog Loop With LNP Non - Design UNE Loop and Port Combinations Switch Ports UNE Combination Other UNE xDSL (ADSL, HDSL, UCL) Line Sharing UNE ISDN Loops UNE Other Design UNE Other Non - Design Local Interoffice Transport Local Interconnection Trunks 	<ul style="list-style-type: none"> 95% Returned

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none"> Fully Mechanized 	<ul style="list-style-type: none"> 95% Returned

O-12: Speed of Answer in Ordering Center

Definition

Measures the average time a customer is in queue.

Exclusions

None

Business Rules

The clock starts when the appropriate option is selected (i.e., 1 for Resale Consumer, 2 for Resale Multiline, and 3 for UNE-LNP, etc.) and the call enters the queue for that particular group in the LCSC. The clock stops when a BellSouth service representative in the LCSC answers the call. The speed of answer is determined by measuring and accumulating the elapsed time from the entry of a CLEC call into the BellSouth automatic call distributor (ACD) until a service representative in BellSouth's Local Carrier Service Center (LCSC) answers the CLEC call.

Calculation

Speed of Answer in Ordering Center = (a / b)

- a = Total seconds in queue
- b = Total number of calls answered in the Reporting Period

Report Structure

Aggregate

- CLEC – Local Carrier Service Center
- BellSouth
 - Business Service Center
 - Residence Service Center

Note: Combination of Residence Service Center and Business Service Center data.

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Mechanized tracking through LCSC Automatic Call Distributor 	<ul style="list-style-type: none"> • Mechanized tracking through BellSouth Retail center support system.

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Aggregate <ul style="list-style-type: none"> • CLEC – Local Carrier Service Center • BellSouth <ul style="list-style-type: none"> - Business Service Center - Residence Service Center 	<ul style="list-style-type: none"> • Parity with Retail

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

O-12: Speed of Answer in Ordering Center

O-13: LNP-Percent Rejected Service Requests

Definition

Percent Rejected Service Request is the percent of total Local Service Requests (LSRs) which are rejected due to error or omission. An LSR is considered valid when it is electronically submitted by the CLEC and passes LNP Gateway edit checks to insure the data received is correctly formatted and complete, i.e., fatal rejects are never accepted and, therefore, are not included.

Exclusions

- Service Requests canceled by the CLEC
- Scheduled OSS Maintenance

Business Rules

An LSR is considered “rejected” when it is submitted electronically but does not pass edit checks in the ordering systems (EDI, TAG, LNP Gateway, LAUTO) and is returned to the CLEC without manual intervention.

Fully Mechanized: There are two types of “Rejects” in the Fully Mechanized category:

A **Fatal Reject** occurs when a CLEC attempts to electronically submit an LSR (via EDI or TAG) but required fields are not populated correctly and the request is returned to the CLEC.

Fatal rejects are reported in a separate column, and for informational purposes ONLY. They are not considered in the calculation of the percent of total LSRs rejected or the total number of rejected LSRs.

An **Auto Clarification** is a valid LSR which is electronically submitted (via EDI or TAG), but is rejected from LAUTO because it does not pass further edit checks for order accuracy. Auto Clarifications are returned without manual intervention.

Partially Mechanized: A valid LSR which is electronically submitted (via EDI or TAG), but cannot be processed electronically due to a CLEC error and “falls out” for manual handling. It is then put into “clarification”, and sent back (rejected) to the CLEC.

Total Mechanized: Combination of Fully Mechanized and Partially Mechanized rejects.

Non-Mechanized: A valid LSR which is faxed or mailed to the BellSouth LCSC.

Calculation

LNP-Percent Rejected Service Requests = (a / b) X 100

- a = Number of Service Requests Rejected in the Reporting Period
- b = Number of Service Requests Received in the Reporting Period

Report Structure

- Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized
- CLEC Specific
- CLEC Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
• Not Applicable	• Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • LNP • UNE Loop With LNP 	<ul style="list-style-type: none"> • Diagnostic

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

O-14: LNP-Reject Interval Distribution & Average Reject Interval

Definition

Reject Interval is the average reject time from receipt of an LSR to the distribution of a Reject. An LSR is considered valid when it is electronically submitted by the CLEC and passes LNP Gateway edit checks to insure the data received is correctly formatted and complete.

Exclusions

- Service Requests canceled by the CLEC
- Designated Holidays are excluded from the interval calculation
- LSRs which are identified and classified as “Projects”
- The following hours for Partially mechanized and Non-mechanized LSRs are excluded from the interval calculation:

Residence Resale Group – Monday through Saturday 7:00PM until 7:00AM
From 7:00 PM Saturday until 7:00 AM Monday

Business Resale, Complex, UNE Groups – Monday through Friday 6:00PM until 8:00AM
From 6:00 PM Friday until 8:00 AM Monday.

The hours excluded will be altered to reflect changes in the Center operating hours. The LCSC will accept faxed LSRs only during posted hours of operation.

The interval will be the amount of time accrued from receipt of the LSR until normal closing of the center if an LSR is worked using overtime hours.

In the case of a Partially Mechanized LSR received and worked after normal business hours, the interval will be set at one (1) minute.

- Scheduled OSS Maintenance

Business Rules

The Reject interval is determined for each rejected LSR processed during the reporting period. The Reject interval is the elapsed time from when BellSouth receives LSR until that LSR is rejected back to the CLEC. Elapsed time for each LSR is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of rejected LSRs to produce the reject interval distribution.

An LSR is considered “rejected” when it is submitted electronically but does not pass edit checks in the ordering systems (EDI, TAG, LNP Gateway, LAUTO) and is returned to the CLEC without manual intervention.

Fully Mechanized: There are two types of “Rejects” in the Fully Mechanized category:

A **Fatal Reject** occurs when a CLEC attempts to electronically submit an LSR but required fields are not populated correctly and the request is returned to the CLEC.

An **Auto Clarification** is a valid LSR which is electronically submitted (via EDI or TAG), but is rejected from LAUTO because it does not pass further edit checks for order accuracy. Auto Clarifications are returned without manual intervention.

Partially Mechanized: A valid LSR which electronically submitted (via EDI or TAG), but cannot be processed electronically due to a CLEC error and “falls out” for manual handling. It is then put into “clarification”, and sent back to the CLEC.

Total Mechanized: Combination of Fully Mechanized and Partially Mechanized rejects.

Non-Mechanized: A valid LSR which is faxed or mailed to the BellSouth LCSC.

Calculation

Reject Interval = (a - b)

- a = Date & Time of Service Request Rejection
- b = Date & Time of Service Request Receipt

Average Reject Interval = (c / d)

- c = Sum of all Reject Intervals
- d = Total Number of Service Requests Rejected in Reporting Period

Reject Interval Distribution = $(e / f) \times 100$

- e = Service Requests Rejected in reported interval
- f = Total Number of Service Requests Rejected in Reporting Period

Report Structure

Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized

- CLEC Specific
- CLEC Aggregate
- State, Region
- Fully Mechanized:
 - 0 - <= 4 minutes
 - >4 - <= 8 minutes
 - >8 - <= 12 minutes
 - >12 - <= 60 minutes
 - 0 - <= 1 hour
 - >1 - <= 4 hours
 - >4 - <= 8 hours
 - >8 - <= 12 hours
 - >12 - <= 16 hours
 - >16 - <= 20 hours
 - >20 - <= 24 hours
 - > 24 hours
- Partially Mechanized:
 - 0 - <= 1 hour
 - >1 - <= 4 hours
 - >4 - <= 8 hours
 - >8 - <= 10 hours
 - 0 - <= 10 hours
 - >10 - <= 18 hours
 - 0 - <= 18 hours
 - >18 - <= 24 hours
 - > 24 hours
- Non-Mechanized:
 - 0 - <= 1 hour
 - >1 - <= 4 hours
 - >4 - <= 8 hours
 - >8 - <= 12 hours
 - >12 - <= 16 hours
 - >16 - <= 20 hours
 - >20 - <= 24 hours
 - 0 - <= 24 hours
 - >24 hours
- Average Interval in Days or Hours

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Reject Interval• Total Number of LSRs• Total number of Rejects• State and Region	<ul style="list-style-type: none">• Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• LNP• UNE Loop with LNP	<ul style="list-style-type: none">• Mechanized: 97% <= 1 Hour• Partially Mechanized: 85% <= 24 Hours• Partially Mechanized: 85% <= 18 Hours (05/01/01)• Partially Mechanized: 85% <= 10 Hours (08/01/01)• Non-Mechanized: 85% <= 24 Hours

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• Not Applicable	<ul style="list-style-type: none">• Not Applicable

O-15: LNP-Firm Order Confirmation Timeliness Interval Distribution & Firm Order Confirmation Average Interval

Definition

Interval for Return of a Firm Order Confirmation (FOC Interval) is the average response time from receipt of a valid LSR to distribution of a firm order confirmation.

Exclusions

- Rejected LSRs
- Designated Holidays are excluded from the interval calculation
- LSRs which are identified and classified as “Projects”
- The following hours for Partially Mechanized and Non-mechanized LSRs are excluded from the interval calculation:

Residence Resale Group – Monday through Saturday 7:00PM until 7:00AM

From 7:00 PM Saturday until 7:00 AM Monday.

Business Resale, Complex, UNE Groups – Monday through Friday 6:00PM until 8:00AM

From 6:00 PM Friday until 8:00 AM Monday.

The hours excluded will be altered to reflect changes in the Center operating hours. The LCSC will accept faxed LSRs only during posted hours of operation.

The interval will be the amount of time accrued from receipt of the LSR until normal closing of the center if an LSR is worked using overtime hours.

In the case of a Partially Mechanized LSR received and worked after normal business hours, the interval will be set at one (1) minute.

- Scheduled OSS Maintenance

Business Rules

- **Fully Mechanized:** The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS or TAG) until the LSR is processed, appropriate service orders are generated and a Firm Order Confirmation is returned to the CLEC via EDI, LENS or TAG.
- **Partially Mechanized:** The elapsed time from receipt of a valid electronically submitted LSR (date and time stamp in EDI, LENS, or TAG) which falls out for manual handling until appropriate service orders are issued by a BellSouth service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS and a Firm Order Confirmation is returned to the CLEC via EDI, LENS, or TAG.
- **Total Mechanized:** Combination of Fully Mechanized and Partially Mechanized LSRs which are electronically submitted by the CLEC.
- **Non-Mechanized:** The elapsed time from receipt of a valid paper LSR (date and time stamp of FAX or date and time paper LSRs received in LCSC) until appropriate service orders are issued by a BellSouth service representative via Direct Order Entry (DOE) or Service Order Negotiation Generation System (SONGS) to SOCS and a Firm Order Confirmation is sent to the CLEC via LON.

Calculation

Firm Order Confirmation Interval = (a - b)

- a = Date & Time of Firm Order Confirmation
- b = Date & Time of Service Request Receipt)

Average FOC Interval = (c / d)

- c = Sum of all FOC Intervals
- d = Total Number of Service Requests Confirmed in Reporting Period

FOC Interval Distribution (for each interval) = (e / f) X 100

- e = Service Requests Confirmed in interval
- f = Total Service Requests Confirmed in the Reporting Period

Report Structure

Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized

- CLEC Specific
- CLEC Aggregate
- State and Region
- Fully Mechanized:
 - 0 - <= 15 minutes
 - >15 - <= 30 minutes
 - >30 - <= 45 minutes
 - >45 - <= 60 minutes
 - >60 - <= 90 minutes
 - >90 - <= 120 minutes
 - >120 - <= 180 minutes
 - 0 - <= 3 hours
 - >3 - <= 6 hours
 - >6 - <= 12 hours
 - >12 - <= 24 hours
 - >24 - <= 48 hours
 - >48 hours
- Partially Mechanized:
 - 0 - <= 4 hours
 - >4 - <= 8 hours
 - >8 - <= 10 hours
 - 0 - <= 10 hours
 - >10 - <= 18 hours
 - 0 - <= 18 hours
 - >18 - <= 24 hours
 - 0 - <= 24 hours
 - >24 - <= 48 hours
 - > 48 hours
- Non-Mechanized:
 - 0 - <= 4 hours
 - >4 - <= 8 hours
 - >8 - <= 12 hours
 - >12 - <= 16 hours
 - >16 - <= 20 hours
 - >20 - <= 24 hours
 - >24 - <= 36 hours
 - 0 - <= 36 hours
 - >36 - <= 48 hours
 - >48 hours

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
Report Month <ul style="list-style-type: none"> • Total Number of LSRs • Total Number of FOCs • State and Region 	<ul style="list-style-type: none"> • Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• LNP• UNE Loop with LNP	<ul style="list-style-type: none">• Mechanized: 95% <= 3 Hours• Partially Mechanized: 85% <= 24 Hours• Partially Mechanized: 85% <= 18 Hours (05/01/01)• Partially Mechanized: 85% <= 10 Hours (08/01/01)• Non-Mechanized: 85% <= 36 hours

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• Not Applicable	<ul style="list-style-type: none">• Not Applicable

Section 3: Provisioning

P-1: Mean Held Order Interval & Distribution Intervals

Definition

When delays occur in completing CLEC orders, the average period that CLEC orders are held for BellSouth reasons, pending a delayed completion, should be no worse for the CLEC when compared to BellSouth delayed orders. Calculation of the interval is the total days orders are held and pending but not completed that have passed the currently committed due date; divided by the total number of held orders. This report is based on orders still pending, held and past their committed due date at the close of the reporting period. The distribution interval is based on the number of orders held and pending but not completed over 15 and 90 days. (Orders reported in the >90 day interval are also included in the >15 day interval.)

Exclusions

- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.)
- Disconnect (D) & From (F) orders
- Orders with appointment code of 'A' for Rural orders

Business Rules

Mean Held Order Interval: This metric is computed at the close of each report period. The held order interval is established by first identifying all orders, at the close of the reporting interval, that both have not been reported as completed in SOCS and have passed the currently committed due date for the order. For each such order, the number of calendar days between the earliest committed due date on which BellSouth had a company missed appointment and the close of the reporting period is established and represents the held order interval for that particular order. The held order interval is accumulated by the standard groupings, unless otherwise noted, and the reason for the order being held. The total number of days accumulated in a category is then divided by the number of held orders within the same category to produce the mean held order interval. The interval is by calendar days with no exclusions for Holidays or Sundays.

CLEC Specific reporting is by type of held order (facilities, equipment, other), total number of orders held, and the total and average days.

Held Order Distribution Interval: This measure provides data to report total days held and identifies these in categories of >15 days and > 90 days. (Orders counted in >90 days are also included in > 15 days).

Calculation

Mean Held Order Interval = a / b

- a = Sum of held-over-days for all Past Due Orders Held for the reporting period
- b = Number of Past Due Orders Held and Pending But Not Completed and past the committed due date

Held Order Distribution Interval (for each interval) = (c / d) X 100

- c = # of Orders Held for >= 15 days or # of Orders Held for >= 90 days
- d = Total # of Past Due Orders Held and Pending But Not Completed)

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Circuit Breakout < 10, >= 10 (except trunks)

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • CLEC Order Number and PON (PON) • Order Submission Date (TICKET_ID) • Committed Due Date (DD) • Service Type (CLASS_SVC_DESC) • Hold Reason • Total Line/circuit Count • Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • Report Month • BellSouth Order Number • Order Submission Date • Committed Due Date • Service Type • Hold Reason • Total Line/circuit Count • Geographic Scope

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence	• Retail Residence
• Resale Business	• Retail Business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN
• LNP (Standalone)	• Retail Residence and Business (POTS)
• INP (Standalone)	• Retail Residence and Business (POTS)
• 2W Analog Loop Design	• Retail Residence and Business Dispatch
• 2W Analog Loop Non-Design	• Retail Residence and Business - POTS Excluding Switch-Based Orders
• 2W Analog Loop With LNP Design	• Retail Residence and Business Dispatch
• 2W Analog Loop With LNP Non-Design	• Retail Residence and Business - POTS Excluding Switch-Based Orders
• 2W Analog Loop With INP-Design	• Retail Residence and Business Dispatch
• 2W Analog Loop With INP Non-Design	• Retail Residence and Business - POTS Excluding Switch-Based Orders
• UNE Digital Loop < DS1	• Retail Digital Loop < DS1
• UNE Digital Loop >= DS1	• Retail Digital Loop >= DS1
• UNE Loop + Port Combinations	• Retail Residence and Business
• UNE Switch Ports	• Retail Residence and Business (POTS)
• UNE Combo Other	• Retail Residence, Business and Design Dispatch
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL Provided to Retail
• UNE ISDN	• Retail ISDN - BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non-Design	• Retail Residence and Business
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice
• Local Interconnection Trunks	• Parity with Retail

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

P-2: Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notices

Definition

When BellSouth can determine in advance that a committed due date is in jeopardy for facility delay, it will provide advance notice to the CLEC.

The interval is from the date/time the notice is released to the CLEC/BellSouth systems until 5pm on the commitment date of the order. The Percent of Orders is the percentage of orders given jeopardy notices for facility delay in the count of orders confirmed in the report period.

Exclusions

- Orders held for CLEC end user reasons
- Disconnect (D) & From (F) orders
- Non-Dispatch Orders

Business Rules

When BellSouth can determine in advance that a committed due date is in jeopardy for facility delay, it will provide advance notice to the CLEC. The number of committed orders in a report period is the number of orders that have a due date in the reporting period. Jeopardy notices for interconnection trunks results are usually zero as these trunks seldom experience facility delays. The Committed due date is considered the Confirmed due date. This report measures dispatched orders only. If an order is originally sent as non-dispatch and it is determined there is a facility delay, the order is converted to a dispatch code so the facility problem can be corrected. It will remain coded dispatched until completion.

Calculation

Jeopardy Interval = a - b

- a = Date and Time of Jeopardy Notice
- b = Date and Time of Scheduled Due Date on Service Order

Average Jeopardy Interval = c / d

- c = Sum of all jeopardy intervals
- d = Number of Orders Notified of Jeopardy in Reporting Period

Percent of Orders Given Jeopardy Notice = (e / f) X 100

- e = Number of Orders Given Jeopardy Notices in Reporting Period
- f = Number of Orders Confirmed (due) in Reporting Period)

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Dispatch Orders
- Mechanized Orders
- Non-Mechanized Orders

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • CLEC Order Number and PON • Date and Time Jeopardy Notice Sent • Committed Due Date • Service Type <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • Report Month • BellSouth Order Number • Date and Time Jeopardy Notice Sent • Committed Due Date • Service Type

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
% Orders Given Jeopardy Notice	
• Resale Residence	• Retail Residence
• Resale Business	• Retail Business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN
• LNP (Standalone)	• Retail Residence and Business (POTS)
• INP (Standalone)	• Retail Residence and Business (POTS)
• 2W Analog Loop Design	• Retail Residence and Business Dispatch
• 2W Analog Loop Non-Design	• Retail Residence and Business - (POTS Excluding Switch-Based Orders)
• 2W Analog Loop With LNP Design	• Retail Residence and Business Dispatch
• 2W Analog Loop With LNP Non-Design	• Retail Residence and Business - (POTS Excluding Switch-Based Orders)
• 2W Analog Loop With INP Design	• Retail Residence and Business Dispatch
• 2W Analog Loop With INP Non-Design	• Retail Residence and Business (POTS Excluding Switch-Based Orders)
• UNE Digital Loop < DS1	• Retail Digital Loop < DS1
• UNE Digital Loop >= DS1	• Retail Digital Loop >= DS1
• UNE Loop + Port Combinations	• Retail Business and Residence
• UNE Switch Ports	• Retail Residence and Business (POTS)
• UNE Combo Other	• Retail Residence, Business and Design Dispatch
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL Provided to Retail
• UNE ISDN	• Retail ISDN BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non -Design	• Retail Residence and Business
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice
• Local Interconnection Trunks	• Parity with Retail
• Average Jeopardy Notice Interval	• 95% >= 48 Hours

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

P-3: Percent Missed Installation Appointments

Definition

“Percent missed installation appointments” monitors the reliability of BellSouth commitments with respect to committed due dates to assure that the CLEC can reliably quote expected due dates to their retail customer as compared to BellSouth. This measure is the percentage of total orders processed for which BellSouth is unable to complete the service orders on the committed due dates and reported for Total misses and End User Misses.

Exclusions

- Canceled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders Test Orders, etc.)
- Disconnect (D) & From (F) orders
- End User Misses on Local Interconnection Trunks

Business Rules

Percent Missed Installation Appointments (PMI) is the percentage of orders with completion dates in the reporting period that are past the original committed due date. Missed Appointments caused by end-user reasons will be included and reported separately. The first commitment date on the service order that is a missed appointment is the missed appointment code used for calculation whether it is a BellSouth missed appointment or an End User missed appointment. The “due date” is any time on the confirmed due date. Which means there cannot be a cutoff time for commitments, as certain types of orders are requested to be worked after standard business hours. Also, during Daylight Savings Time, field technicians are scheduled until 9PM in some areas and the customer is offered a greater range of intervals from which to select.

Calculation

Percent Missed Installation Appointments = (a / b) X 100

- a = Number of Orders with Completion date in Reporting Period past the Original Committed Due Date
- b = Number of Orders Completed in Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Report in Categories of <10 lines/circuits >= 10 lines/circuits (except trunks)
- Dispatch/No Dispatch

Report Explanation: The difference between End User MA and Total MA is the result of BellSouth caused misses. Here, Total MA is the total percent of orders missed either by BellSouth or CLEC end user. The End User MA represents the percentage of orders missed by the CLEC or their end user.

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • CLEC Order Number and PON (PON) • Committed Due Date (DD) • Completion Date (CMPLTN DD) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • Report Month • BellSouth Order Number • Committed Due Date (DD) • Completion Date (CMPLTN DD) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope

SQM Disaggregation - Analog/Benchmark

SQM LEVEL of Disaggregation	SQM Analog/Benchmark
• Resale Residence	• Retail Residence
• Resale Business	• Retail Business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN
• LNP (Standalone)	• Retail Residence and Business (POTS)
• INP (Standalone)	• Retail Residence and Business (POTS)
• 2W Analog Loop Design	• Retail Residence and Business Dispatch
• 2W Analog Loop Non-Design <ul style="list-style-type: none"> - Dispatch - Non-Dispatch (Dispatch In) 	• Retail Residence and Business - (POTS Excluding Switch-Based Orders) <ul style="list-style-type: none"> - Dispatch - Non-Dispatch (Dispatch In)
• 2W Analog Loop With LNP Design	• Retail Residence and Business Dispatch
• 2W Analog Loop With LNP Non-Design <ul style="list-style-type: none"> - Dispatch - Non-Dispatch (Dispatch In) 	• Retail Residence and Business - (POTS Excluding Switch-Based Orders) <ul style="list-style-type: none"> - Dispatch - Non-Dispatch (Dispatch In)
• 2W Analog Loop With INP Design	• Retail Residence and Business Dispatch
• 2W Analog Loop With INP Non-Design <ul style="list-style-type: none"> - Dispatch - Non-Dispatch (Dispatch In) 	• Retail Residence and Business (POTS Excluding Switch-Based Orders) <ul style="list-style-type: none"> - Dispatch - Non-Dispatch (Dispatch In)
• UNE Digital Loop < DS1	• Retail Digital Loop < DS1
• UNE Digital Loop >= DS1	• Retail Digital Loop >= DS1
• UNE Loop + Port Combinations <ul style="list-style-type: none"> - Dispatch Out - Non-Dispatch - Dispatch In - Switch-Based 	• Retail Residence and Business <ul style="list-style-type: none"> - Dispatch Out - Non-Dispatch - Dispatch In - Switch-Based
• UNE Switch Ports	• Retail Residence and Business (POTS)
• UNE Combo Other <ul style="list-style-type: none"> - Dispatch - Non-Dispatch (Dispatch In) 	• Retail Residence, Business and Design Dispatch (Including Dispatch Out and Dispatch In) <ul style="list-style-type: none"> - Dispatch - Non-Dispatch (Dispatch In)
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL Provided to Retail
• UNE ISDN	• Retail ISDN - BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non - Design	• Retail Residence and Business
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice
• Local Interconnection Trunks	• Parity with Retail

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	X

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Resale POTS	• Retail Residence and Business (POTS)
• Resale Design	• Retail Design
• UNE Loop + Port Combinations	• Retail Residence and Business
• UNE Loops	• Retail Residence and Business Dispatch
• UNE xDSL	• ADSL Provided to Retail
• UNE Line Sharing	• ADSL Provided to Retail
• Local Interconnection Trunks	• Parity with Retail

P-4: Average Completion Interval (OCI) & Order Completion Interval Distribution

Definition

The “average completion interval” measure monitors the interval of time it takes BellSouth to provide service for the CLEC or its own customers. The “Order Completion Interval Distribution” provides the percentages of orders completed within certain time periods. This report measures how well BellSouth meets the interval offered to customers on service orders.

Exclusions

- Canceled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.)
- Disconnect (D&F) orders (Except “D” orders associated with LNP Standalone)
- “L” Appointment coded orders (where the customer has requested a later than offered interval)

Business Rules

The actual completion interval is determined for each order processed during the reporting period. The completion interval is the elapsed time from when BellSouth issues a FOC or SOCS date time stamp receipt of an order from the CLEC to BellSouth’s actual order completion date. This includes all delays for BellSouth’s CLEC/End Users. The clock starts when a valid order number is assigned by SOCS and stops when the technician or system completes the order in SOCS. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed. Orders that are worked on zero due dates are calculated with a .33-day interval (8 hours) in order to report a portion of a day interval. These orders are issued and worked/completed on the same day. They can be either flow through orders (no field work-non-dispatched) or field orders (dispatched).

The interval breakout for UNE and Design is: 0-5 = 0-4.99, 5-10 = 5-9.99, 10-15 = 10-14.99, 15-20 = 15- 19.99, 20-25 = 20-24.99, 25-30 = 25-29.99, >= 30 = 30 and greater.

Calculation

Completion Interval = (a - b)

- a = Completion Date
- b = Order Issue Date

Average Completion Interval = (c / d)

- c = Sum of all Completion Intervals
- d = Count of Orders Completed in Reporting Period

Order Completion Interval Distribution (for each interval) = (e / f) X 100

- e = Service Orders Completed in “X” days
- f = Total Service Orders Completed in Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Dispatch / No Dispatch categories applicable to all levels except trunks
- Residence & Business reported in day intervals = 0, 1, 2, 3, 4, 5, 5+
- UNE and Design reported in day intervals = 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, >= 30
- All Levels are reported <10 line/circuits; >= 10 line/circuits (except trunks)
- ISDN Orders included in Non-Design

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> Report Month CLEC Company Name Order Number (PON) Application Date & Time (TICKET_ID) Completion Date (CMLPTN_DT) Service Type (CLASS_SVC_DESC) Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> Report Month BellSouth Order Number Application Date & Time Order Completion Date & Time Service Type Geographic Scope

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence	• Retail Residence
• Resale Business	• Retail Business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN
• LNP (Standalone)	• Retail Residence and Business (POTS)
• INP (Standalone)	• Retail Residence and Business (POTS)
• 2W Analog Loop Design	• Retail Residence and Business Dispatch
• 2W Analog Loop Non-Design	• Retail Residence and Business - (POTS Excluding Switch-Based Orders)
- Dispatch	- Dispatch
- Non-Dispatch (Dispatch In)	- Non-Dispatch (Dispatch In)
• 2W Analog Loop With LNP Design	• Retail Residence and Business Dispatch
• 2W Analog Loop With LNP Non-Design	• Retail Residence and Business - (POTS Excluding Switch-Based Orders)
- Dispatch	- Dispatch
- Non-Dispatch (Dispatch In)	- Non-Dispatch (Dispatch In)
• 2W Analog Loop With INP Design	• Retail Residence and Business Dispatch
• 2W Analog Loop With INP Non-Design	• Retail Residence and Business - (POTS Excluding Switch-Based Orders)
- Dispatch	- Dispatch
- Non-Dispatch (Dispatch In)	- Non-Dispatch (Dispatch In)
• UNE Digital Loop < DS1	• Retail Digital Loop < DS1
• UNE Digital Loop >= DS1	• Retail Digital Loop >= DS1
• UNE Loop + Port Combinations	• Retail Residence and Business
- Dispatch Out	- Dispatch Out
- Non-Dispatch	- Non-Dispatch
- Dispatch In	- Dispatch In
- Switch-Based	- Switch-Based
• UNE Switch Ports	• Retail Residence and Business (POTS)

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> UNE Combo Other <ul style="list-style-type: none"> - Dispatch - Non-Dispatch (Dispatch In) 	<ul style="list-style-type: none"> Retail Residence, Business and Design Dispatch (Including Dispatch Out and Dispatch In) <ul style="list-style-type: none"> - Dispatch - Non-Dispatch (Dispatch In)
• UNE xDSL (HDSL, ADSL and UCL) without conditioning	• 7 Days
• UNE xDSL (HDSL, ADSL and UCL) with conditioning	• 14 Days
• UNE ISDN	• Retail ISDN BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non-Design	• Retail Residence and Business
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice
• Local Interconnection Trunks	• Parity with Retail

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	X

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Resale POTS	• Retail Residence and Business (POTS)
• Resale Design	• Retail Design
• UNE Loop + Port Combinations	• Retail Residence and Business
• UNE Loops	• Retail Residence and Business Dispatch
• UNE xDSL without conditioning	• 7 Days
• UNE xDSL with conditioning	• 14 Days
• UNE Line Sharing	• ADSL Provided to Retail
• Local Interconnection Trunks	• Parity with Retail

P-5: Average Completion Notice Interval

Definitions

The Completion Notice Interval is the elapsed time between the BellSouth reported completion of work and the issuance of a valid completion notice to the CLEC.

Exclusions

- Cancelled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.)
- D&F orders (Exception: "D" orders associated with LNP Standalone)

Business Rules

Measurement on interval of completion date and time entered by a field technician on dispatched orders, and 5PM start time on the due date for non-dispatched orders; to the release of a notice to the CLEC/BellSouth of the completion status. The field technician notifies the CLEC the work was complete and then he/she enters the completion time stamp information in his/her computer. This information switches through to the SOCS systems either completing the order or rejecting the order to the Work Management Center (WMC). If the completion is rejected, it is manually corrected and then completed by the WMC. The notice is returned on each individual order.

The start time for all orders is the completion stamp either by the field technician or the 5PM due date stamp; the end time for mechanized orders is the time stamp the notice was transmitted to the CLEC interface (LENS, EDI, OR TAG). For non-mechanized orders the end timestamp will be timestamp of order update to C-SOTS system.

Calculation

Completion Notice Interval = (a - b)

- a = Date and Time of Notice of Completion
- b = Date and Time of Work Completion

Average Completion Notice Interval = c / d

- c = Sum of all Completion Notice Intervals
- d = Number of Orders with Notice of Completion in Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Mechanized Orders
- Non-Mechanized Orders
- Reporting intervals in Hours; 0, 1-2, 2-4, 4-8, 8-12, 12-24, >= 24 plus Overall Average Hour Interval (The categories are inclusive of these time intervals: 0-1 = 0.99; 1-2 = 1-1.99; 2-4 = 2-3.99, etc.)
- Reported in categories of <10 line/circuits; >= 10 line/circuits (except trunks)

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • CLEC Order Number (so_nbr) • Work Completion Date (cmplt_n_dt) • Work Completion Time • Completion Notice Availability Date • Completion Notice Availability Time • Service Type • Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • Report Month • BellSouth Order Number (so_nbr) • Work Completion Date (cmplt_n_dt) • Work Completion Time • Completion Notice Availability Date • Completion Notice Availability Time • Service Type • Geographic Scope <p>NOTE: Code in parentheses is the corresponding header found in the raw data file.</p>

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence	• Retail Residence
• Resale Business	• Retail Business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN
• LNP (Standalone)	• Retail Residence and Business (POTS)
• INP (Standalone)	• Retail Residence and Business (POTS)
• 2W Analog Loop Design	• Retail Residence and Business Dispatch
• 2W Analog Loop Non-Design	• Retail Residence and Business - (POTS Excluding Switch-Based Orders)
- Dispatch	- Dispatch
- Non-Dispatch (Dispatch In)	- Non-Dispatch (Dispatch In)
• 2W Analog Loop With LNP Design	• Retail Residence and Business Dispatch
• 2W Analog Loop With LNP Non-Design	• Retail Residence and Business - (POTS Excluding Switch-Based Orders)
- Dispatch	- Dispatch
- Non-Dispatch (Dispatch In)	- Non-Dispatch (Dispatch In)
• 2W Analog Loop With INP Design	• Retail Residence and Business Dispatch
• 2W Analog Loop With INP Non-Design	• Retail Residence and Business (POTS Excluding Switch-Based Orders)
- Dispatch	- Dispatch
- Non-Dispatch (Dispatch In)	- Non-Dispatch (Dispatch In)
• UNE Digital Loop < DS1	• Retail Digital Loop < DS1
• UNE Digital Loop >= DS1	• Retail Digital Loop >= DS1
• UNE Loop + Port Combinations	• Retail Residence and Business
- Dispatch Out	- Dispatch Out
- Non-Dispatch	- Non-Dispatch
- Dispatch In	- Dispatch In
- Switch-Based	- Switch-Based
• UNE Switch Ports	• Retail Residence and Business (POTS)

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">UNE Combo Other<ul style="list-style-type: none">- Dispatch- Non-Dispatch (Dispatch In)	<ul style="list-style-type: none">Retail Residence, Business and Design Dispatch (Including Dispatch Out and Dispatch In)<ul style="list-style-type: none">- Dispatch- Non-Dispatch (Dispatch In)
<ul style="list-style-type: none">UNE xDSL (HDSL, ADSL and UCL)	<ul style="list-style-type: none">ADSL Provided to Retail
<ul style="list-style-type: none">UNE ISDN	<ul style="list-style-type: none">Retail ISDN BRI
<ul style="list-style-type: none">UNE Line Sharing	<ul style="list-style-type: none">ADSL Provided to Retail
<ul style="list-style-type: none">UNE Other Design	<ul style="list-style-type: none">Retail Design
<ul style="list-style-type: none">UNE Other Non-Design	<ul style="list-style-type: none">Retail Residence and Business
<ul style="list-style-type: none">Local Transport (Unbundled Interoffice Transport)	<ul style="list-style-type: none">Retail DS1/DS3 Interoffice
<ul style="list-style-type: none">Local Interconnection Trunks	<ul style="list-style-type: none">Parity with Retail

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">Not Applicable	<ul style="list-style-type: none">Not Applicable

P-6: % Completions/Attempts without Notice or < 24 hours Notice

Definition

This Report measures the interval from the FOC end timestamp on the LSR until 5:00 P.M. on the original committed due date of a service order. The purpose of this measure is to report if BellSouth is returning a FOC to the CLEC in time for the CLEC to notify their customer of the scheduled date.

Exclusions

“0” dated orders or any request where the subscriber requested an earlier due date of < 24 hours prior to the original commitment date, or any LSR received < 24 hours prior to the original commitment date.

Business Rules

For CLEC Results:

Calculation would exclude any successful or unsuccessful service delivery where the CLEC was informed at least 24 hours in advance. BellSouth may also exclude from calculation any LSRs received from the requesting CLEC with less than 24 hour notice prior to the commitment date.

For BellSouth Results:

BellSouth does not provide a FOC to its retail customers.

Calculation

Percent Completions or Attempts without Notice or with Less Than 24 Hours Notice = $(a / b) \times 100$

- a = Completion Dispatches (Successful and Unsuccessful) With No FOC or FOC Received < 24 Hours of original Committed Due Date
- b = All Completions

Report Structure

- CLEC Specific
- CLEC Aggregate
- Dispatch /Non-Dispatch
- Total Orders FOC < 24 Hours
- Total Completed Service Orders
- % FOC < 24 Hours

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Committed Due Date (DD)• FOC End Timestamp• Report Month• CLEC Order Number and PON• Geographic Scope<ul style="list-style-type: none">- State / Region	<ul style="list-style-type: none">• Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • Resale Residence • Resale Business • Resale Design • Resale PBX • Resale Centrex • Resale ISDN • LNP (Standalone) • INP (Standalone) • 2W Analog Loop Design • 2W Analog Loop Non-Design • 2W Analog Loop With LNP-Design • 2W Analog Loop With LNP Non-Design • 2W Analog Loop With INP-Design • 2W Analog Loop With INP Non-Design • UNE Digital Loop < DS1 • UNE Digital Loop >=DS1 • UNE Loop + Port Combinations • UNE Switch ports • UNE Combo Other • UNE xDSL (HDSL, ADSL and UCL) • UNE ISDN • UNE Line Sharing • UNE Other Design • UNE Other Non -Design • Local Transport (Unbundled Interoffice Transport) • Local Interconnection Trunks 	<ul style="list-style-type: none"> • Diagnostic

P-6: % Completions/Attempts without Notice or < 24 hours Notice

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none"> • Not Applicable 	<ul style="list-style-type: none"> • Not Applicable

P-7: Coordinated Customer Conversions Interval

Definition

This report measures the average time it takes BellSouth to disconnect an unbundled loop from the BellSouth switch and cross connect it to CLEC equipment. This measurement applies to service orders with INP and with LNP, and where the CLEC has requested BellSouth to provide a coordinated cut over.

Exclusions

- Any order canceled by the CLEC will be excluded from this measurement
- Delays due to CLEC following disconnection of the unbundled loop
- Unbundled Loops where there is no existing subscriber loop and loops where coordination is not requested

Business Rules

When the service order includes INP, the interval includes the total time for the cut over including the translation time to place the line back in service on the ported line. When the service order includes LNP, the interval only includes the total time for the cut over (the port of the number is controlled by the CLEC). The interval is calculated for the entire cut over time for the service order and then divided by items worked in that time to give the average per-item interval for each service order.

Calculation

Coordinated Customer Conversions Interval = (a - b)

- a = Completion Date and Time for Cross Connection of a Coordinated Unbundled Loop
- b = Disconnection Date and Time of an Coordinated Unbundled Loop

Percent Coordinated Customer Conversions (for each interval) = (c / d) X 100

- c = Total number of Coordinated Customer Conversions for each interval
- d = Total Number of Unbundled Loop with Coordinated Conversions (items) for the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- The interval breakout is 0-5 = 0-4.99, 5-15 = 5-14.99, >=15 = 15 and greater, plus Overall Average Interval.

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • CLEC Order Number • Committed Due Date (DD) • Service Type (CLASS_SVC_DESC) • Cut over Start Time • Cut over Completion Time • Portability Start and Completion Times (INP orders) • Total Conversions (Items) <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • No BellSouth Analog Exists

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • Unbundled Loops with INP/LNP • Unbundled Loops without INP/LNP 	<ul style="list-style-type: none"> • 95% <= 15 minutes

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Unbundled Loops	• 95% <= 15 minutes

P-7A: Coordinated Customer Conversions – Hot Cut Timeliness% Within Interval and Average Interval

Definition

This category measures whether BellSouth begins the cut over of an unbundled loop on a coordinated and/or a time specific order at the CLEC requested start time. It measures the percentage of orders where the cut begins within 15 minutes of the requested start time of the order and the average interval.

Exclusions

- Any order canceled by the CLEC will be excluded from this measurement
- Delays caused by the CLEC
- Unbundled Loops where there is no existing subscriber loop and loops where coordination is not requested
- All unbundled loops on multiple loop orders after the first loop

Business Rules

This report measures whether BellSouth begins the cut over of an unbundled loop on a coordinated and/or a time specific order at the CLEC requested start time. The cut is considered on time if it starts 15 minutes before or after the requested start time. Using the scheduled time and the actual cut over start time, the measurement will calculate the percent within interval and the average interval. If a cut involves multiple lines, the cut will be considered “on time” if the first line is cut within the interval. ≤ 15 minutes includes intervals that began 15:00 minutes or less before the scheduled cut time and cuts that began 15 minutes or less after the scheduled cut time; >15 minutes, ≤ 30 minutes includes cuts within 15:00 – 30:00 minutes either prior to or after the scheduled cut time; >30 minutes includes cuts greater than 30:00 minutes either prior to or after the scheduled cut time.

Calculation

% within Interval = $(a / b) \times 100$

- a = Total Number of Coordinated Unbundled Loop Orders for the interval
- b = Total Number of Coordinated Unbundled Loop Orders for the reporting period

Interval = $(c - d)$

- c = Scheduled Time for Cross Connection of a Coordinated Unbundled Loop Order
- d = Actual Start Date and Time of a Coordinated Unbundled Loop Order

Average Interval = (e / f)

- Sum of all Intervals
- Total Number of Coordinated Unbundled Loop Orders for the reporting period.

Report Structure

- CLEC Specific
- CLEC Aggregate
Reported in intervals of early, on time and late cuts % ≤ 15 minutes; % >15 minutes, ≤ 30 minutes; % > 30 minutes, plus Overall Average Interval.

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• CLEC Order Number (so_nbr)• Committed Due Date (DD)• Service Type (CLASS_SVC_DESC)• Cut over Scheduled Start Time• Cut over Actual Start Time• Total Conversions Orders <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none">• No BellSouth Analog exists

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Product Reporting Level<ul style="list-style-type: none">- SL1 Time Specific- SL1 Non-Time Specific- SL2 Time Specific- SL2 Non-Time Specific	<ul style="list-style-type: none">• 95% Within + or – 15 minutes of Scheduled Start Time

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• UNE Loops	<ul style="list-style-type: none">• 95% Within + or – 15 minutes of Scheduled Start time

P-7B: Coordinated Customer Conversions – Average Recovery Time

Definition

Measures the time between notification and resolution by BellSouth of a service outage found that can be isolated to the BellSouth side of the network. The time between notification and resolution by BellSouth must be measured to ensure that CLEC customers do not experience unjustifiable lengthy service outages during a Coordinated Customer Conversion. This report measures outages associated with Coordinated Customer Conversions prior to service order completion.

Exclusions

- Cut overs where service outages are due to CLEC caused reasons
- Cut overs where service outages are due to end-user caused reasons

Business Rules

Measures the outage duration time related to Coordinated Customer Conversions from the initial trouble notification until the trouble has been restored and the CLEC has been notified. The duration time is defined as the time from the initial trouble notification until the trouble has been restored and the CLEC has been notified. The interval is calculated on the total outage time for the circuits divided by the total number of outages restored during the report period to give the average outage duration.

Calculation

Recovery Time = (a - b)

- a = Date & Time That Trouble is Closed by CLEC
- b = Date & Time Initial Trouble is Opened with BellSouth

Average Recovery Time = (c / d)

- c = Sum of all the Recovery Times
- d = Number of Troubles Referred to the BellSouth

Report Structure

- CLEC Specific
- CLEC Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• CLEC Company Name• CLEC Order Number (so_nbr)• Committed Due Date (DD)• Service Type (CLASS_SVC_DESC)• CLEC Acceptance Conflict (CLEC_CONFLICT)• CLEC Conflict Resolved (CLEC_RESOLVE)• CLEC Conflict MFC (CLEC_CONFLICT_MFC)• Total Conversion Orders <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none">• None

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Unbundled Loops with INP/LNP• Unbundled Loops without INP/LNP	<ul style="list-style-type: none">• Diagnostic

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

P-7C: Hot Cut Conversions - % Provisioning Troubles Received Within 7 days of a completed Service Order

Definition

Percent Provisioning Troubles received within 7 days of a completed service order associated with a Coordinated and Non-Coordinated Customer Conversion. Measures the quality and accuracy of Hot Cut Conversion Activities.

Exclusions

- Any order canceled by the CLEC
- Troubles caused by Customer Provided Equipment

Business Rules

Measures the quality and accuracy of completed service orders associated with Coordinated and Non-Coordinated Hot Cut Conversions. The first trouble report received on a circuit ID within 7 days following a service order completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated searching in the prior report period for completed Coordinated and Non-Coordinated Hot Cut Conversion service orders and following 7 days after the completion of the service order for a trouble report issue date.

Calculation

% Provisioning Troubles within 7 days of service order completion = $(a / b) \times 100$

- a = The sum of all Hot Cut Circuits with a trouble within 7 days following service order(s) completion
- b = The total number of Hot Cut service order circuits completed in the previous report calendar month

Report Structure

- CLEC Specific
- CLEC Aggregate
- Dispatch/Non-Dispatch

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • CLEC Order Number (so_nbr) • PON • Order Submission Date (TICKET_ID) • Order Submission Time (TICKET_ID) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope • Total Conversion Circuits <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • No BellSouth Analog Exists

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • UNE Loop Design • UNE Loop Non-Design 	<ul style="list-style-type: none"> • $\leq 5\%$

P-7C: Hot Cut Conversions - % Provisioning Troubles Received Within 7 days of a completed Service Order

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• UNE Loops	• <= 5%

P-8: Cooperative Acceptance Testing - % of xDSL Loops Tested

Definition

The loop will be considered cooperatively tested when the BellSouth technician places a call to the CLEC representative to initiate cooperative testing and jointly performs the tests with the CLEC.

Exclusions

- Testing failures due to CLEC (incorrect contact number, CLEC not ready, etc.)
- xDSL lines with no request for cooperative testing

Business Rules

When a BellSouth technician finishes delivering an order for an xDSL loop where the CLEC order calls for cooperative testing at the customer's premise, the BellSouth technician is to call a toll free number to the CLEC testing center. The BellSouth technician and the CLEC representative at the center then test the line. As an example of the type of testing performed, the testing center may ask the technician to put a short on the line so that the center can run a test to see if it can identify the short.

Calculation

Cooperative Acceptance Testing - % of xDSL Loops Tested = $(a / b) \times 100$

- a = Total number of successful xDSL cooperative tests for xDSL lines where cooperative testing was requested in the reporting period
- b = Total Number of xDSL line tests requested by the CLEC and scheduled in the reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Type of Loop tested

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • CLEC Company Name (OCN) • CLEC Order Number (so_nbr) and PON (PON) • Committed Due Date (DD) • Service Type (CLASS_SVC_DESC) • Acceptance Testing Completed (ACCEPT_TESTING) • Acceptance Testing Declined (ACCEPT_TESTING) • Total xDSL Orders <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • No BellSouth Analog Exists

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation:	SQM Analog/Benchmark:
<ul style="list-style-type: none"> • UNE xDSL <ul style="list-style-type: none"> - ADSL - HDSL - UCL - OTHER 	<ul style="list-style-type: none"> • 95% of Lines Tested

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• UNE xDSL	• 95% of Lines Tested

P-8: Cooperative Acceptance Testing - % of xDSL Loops Tested

P-9: % Provisioning Troubles within 30 days of Service Order Completion

Definition

Percent Provisioning Troubles within 30 days of Service Order Completion measures the quality and accuracy of Service order activities.

Exclusions

- Canceled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.)
- D & F orders
- Trouble reports caused and closed out to Customer Provided Equipment (CPE)

Business Rules

Measures the quality and accuracy of completed orders. The first trouble report from a service order after completion is counted in this measure. Subsequent trouble reports are measured in Repeat Report Rate. Reports are calculated searching in the prior report period for completed service orders and following 30 days after completion of the service order for a trouble report issue date.

D & F orders are excluded as there is no subsequent activity following a disconnect.

Note: Standalone LNP historical data is not available in the maintenance systems (LMOS or WFA).

Calculation

% Provisioning Troubles within 30 days of Service Order Activity = (a / b) X 100

- a = Trouble reports on all completed orders 30 days following service order(s) completion
- b = All Service Orders completed in the previous report calendar month

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Reported in categories of <10 line/circuits; >= 10 line/circuits (except trunks)
- Dispatch / No Dispatch (except trunks)

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • CLEC Order Number and PON • Order Submission Date (TICKET_ID) • Order Submission Time (TICKET_ID) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • Report Month • BellSouth Order Number • Order Submission Date • Order Submission Time • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • Resale Residence 	<ul style="list-style-type: none"> • Retail Residence

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Business	• Retail business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN
• 2W Analog Loop Design	• Retail Residence and Business Dispatch
• 2W Analog Loop Non-Design - Dispatch - Non-Dispatch (Dispatch In)	• Retail Residence and Business - (POTS Excluding Switch-Based Orders) - Dispatch - Non-Dispatch (Dispatch In)
• 2W Analog Loop With LNP Design	• Retail Residence and Business Dispatch
• 2W Analog Loop With LNP Non-Design - Dispatch - Non-Dispatch (Dispatch In)	• Retail Residence and Business - (POTS Excluding Switch-Based Orders) - Dispatch - Non-Dispatch (Dispatch In)
• 2W Analog Loop With INP Design	• Retail Residence and Business Dispatch
• 2W Analog Loop With INP Non-Design - Dispatch - Non-Dispatch (Dispatch In)	• Retail Residence and Business (POTS - Excluding Switch-Based Orders) - Dispatch - Non-Dispatch (Dispatch In)
• UNE Digital Loop < DS1	• Retail Digital Loop < DS1
• UNE Digital Loop >= DS1	• Retail Digital Loop >= DS1
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL provided to Retail
• UNE ISDN	• Retail ISDN BRI
• UNE Line Sharing	• ADSL Provided to Retail
• INP (Standalone)	• Retail Residence and Business (POTS)
• LNP (Standalone)	• Retail Residence and Business (POTS)
• UNE Loop + Port Combinations - Dispatch Out - Non-Dispatch - Dispatch In - Switch-Based	• Retail Residence and Business - Dispatch Out - Non-Dispatch - Dispatch In - Switch-Based
• UNE Switch Ports	• Retail Residence and Business (POTS)
• UNE Combo Other - Dispatch - Non-Dispatch (Dispatch In)	• Retail Residence, Business and Design Dispatch (Including Dispatch Out and Dispatch In) - Dispatch - Non-Dispatch (Dispatch In)
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice
• UNE Other Non-Design	• Retail Residence and Business
• UNE Other Design	• Retail Design
• Local Interconnection Trunks	• Parity with Retail

P-9: % Provisioning Troubles within 30 days of Service Order Completion

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Resale POTS	• Retail Residence and Business (POTS)
• Resale Design	• Retail Design
• UNE Loop + Port Combinations	• Retail Residence and Business
• UNE Loops	• Retail Residence and Business Dispatch
• UNE xDSL	• ADSL Provided to Retail
• UNE Line Sharing	• ADSL Provided to Retail
• Local Interconnection Trunks	• Parity with Retail

P-10: Total Service Order Cycle Time (TSOCT)

Definition

This report measures the total service order cycle time from receipt of a valid service order request to the return of a completion notice to the CLEC Interface.

Exclusions

- Canceled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.)
- D (Disconnect - Except "D" orders associated with LNP Standalone.) and F (From) orders. (From is disconnect side of a move order when the customer moves to a new address)
- "L" Appointment coded orders (where the customer has requested a later than offered interval)
- Orders with CLEC/Subscriber caused delays or CLEC/Subscriber requested due date changes

Business Rules

The interval is determined for each order processed during the reporting period. This measurement combines three reports: FOC Timeliness, Average Order Completion Interval and Average Completion Notice Interval. For UNE XDSL Loop, this measurement combines Service Inquiry Interval (SI), FOC Timeliness, Average Completion Interval, and Average Completion Notice Interval.

This interval starts with the receipt of a valid service order request and stops when a completion notice is sent to the CLEC Interface (LENS, TAG OR EDI) and the BellSouth Legacy Systems. Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed. Orders that are worked on zero due dates are calculated with a .33 day interval (8 hours) in order to report a portion of a day interval. These orders are issued and worked/completed on same day. They can be either flow through orders (no field work-non-dispatched) or field orders (dispatched).

Reporting is by Fully Mechanized, Partially Mechanized and Non-Mechanized receipt of LSRs.

Calculation

Total Service Order Cycle Time = (a - b)

- a = Service Order Completion Notice Date
- b = Service Request Receipt Date

Average Total Service Order Cycle Time = (c / d)

- c = Sum of all Total Service Order Cycle Times
- d = Total Number Service Orders Completed in Reporting Period

Total Service Order Cycle Time Interval Distribution (for each interval) = (e / f) X 100

- e = Total Number of Service Requests Completed in "X" minutes/hours
- f = Total Number of Service Requests Received in Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Fully Mechanized; Partially Mechanized; Non-Mechanized
- Report in categories of <10 line/circuits; >= 10 line/circuits (except trunks)
- Dispatch / No Dispatch categories applicable to all levels except trunks
- Intervals 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, >= 30 Days. The interval breakout is: 0-5 = 0-4.99, 5-10 = 5-9.99, 10-15 = 10-14.99, 15-20 = 15-19.99, 20-25 = 20-24.99, 25-30 = 25-29.99, >= 30 = 30 and greater.

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Interval for FOC • CLEC Company Name (OCN) • Order Number (PON) • Submission Date & Time (TICKET_ID) • Completion Date (CMPLTN_DT) • Completion Notice Date and Time • Service Type (CLASS_SVC_DESC) • Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file</p>	<ul style="list-style-type: none"> • Report Month • BellSouth Order Number • Order Submission Date & Time • Order Completion Date & Time • Service Type • Geographic Scope

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • Resale Residence • Resale Business • Resale Design • Resale PBX • Resale Centrex • Resale ISDN • LNP (Standalone) • INP (Standalone) • 2W Analog Loop Design • 2W Analog Loop Non-Design • 2W Analog Loop With LNP Design • 2W Analog Loop With LNP Non-Design • UNE Switch Ports • UNE Loop + Port Combinations • UNE Combo Other • UNE xDSL (HDSL, ADSL and UCL) • UNE ISDN • UNE Line Sharing • UNE Other Design • UNE Other Non -Design • UNE Digital Loops < DS1 • UNE Digital Loops >= DS1 • Local Transport (Unbundled Interoffice Transport) • Local Interconnection Trunks 	<ul style="list-style-type: none"> • Diagnostic

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

P-10: Total Service Order Cycle Time (TSOCT)

P-11: Service Order Accuracy

Definition

The “service order accuracy” measurement measures the accuracy and completeness of a sample of BellSouth service orders by comparing what was ordered and what was completed.

Exclusions

- Cancelled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.)
- D & F orders

Business Rules

A statistically valid sample of service orders, completed during a monthly reporting period, is compared to the original account profile and the order that the CLEC sent to BellSouth. An order is “completed without error” if all service attributes and account detail changes (as determined by comparing the original order) completely and accurately reflect the activity specified on the original order and any supplemental CLEC order. For both small and large sample sizes, when a Service Request cannot be matched with a corresponding Service Order, it will not be counted. For small sample sizes an effort will be made to replace the service request.

Calculation

Percent Service Order Accuracy = $(a \div b) \times 100$

- a = Orders Completed without Error
- b = Orders Completed in Reporting Period

Report Structure

- CLEC Aggregate
- Reported in categories of <10 line/circuits; >= 10 line/circuits
- Dispatch / No Dispatch

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• CLEC Order Number and PON• Local Service Request (LSR)• Order Submission Date• Committed Due Date• Service Type• Standard Order Activity	<ul style="list-style-type: none">• No BellSouth Analog Exist

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Resale Residence• Resale Business• Resale Design (Specials)• UNE Specials (Design)• UNE (Non-Design)• Local Interconnection Trunks	<ul style="list-style-type: none">• 95% Accurate

SEEM Measure

SEEM Measure		
Yes	Tier I	
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• Resale Residence• Resale Business• Resale Design (Specials)• UNE Specials (Design)• UNE (Non-Design)• Local Interconnection Trunks	<ul style="list-style-type: none">• 95% Accurate

P-12: LNP-Percent Missed Installation Appointments

Definition

“Percent missed installation appointments” monitors the reliability of BellSouth commitments with respect to committed due dates to assure that CLECs can reliably quote expected due dates to their retail customer as compared to BellSouth. This measure is the percentage of total orders processed for which BellSouth is unable to complete the service orders on the committed due dates and reported for total misses and End User Misses.

Exclusions

- Canceled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.) where identifiable

Business Rules

Percent Missed Installation Appointments (PMI) is the percentage of total orders processed for which BellSouth is unable to complete the service orders on the committed due dates. Missed Appointments caused by end-user reasons will be included and reported in a separate category. The first commitment date on the service order that is a missed appointment is the missed appointment code used for calculation whether it is a BellSouth missed appointment or an End User missed appointment. The “due date” is any time on the confirmed due date, which means there cannot be a cutoff time for commitments as certain types of orders are requested to be worked after standard business hours.

Calculation

LNP Percent Missed Installation Appointments = $(a / b) \times 100$

- a = Number of Orders with Completion date in Reporting Period past the Original Committed Due Date
- b = Number of Orders Completed in Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
 - State/Region
- Report in Categories of <10 lines/circuits >= 10 lines/circuits (except trunks)

Report explanation: Total Missed Appointments is the total percent of orders missed either by BellSouth or the CLEC end user. End User MA represents the percentage of orders missed by the CLEC end user. The difference between End User Missed Appointments and Total Missed Appointments is the result of BellSouth caused misses.

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • CLEC Order Number and PON (PON) • Committed Due Date (DD) • Completion Date (CMPLTN DD) • Status Type • Status Notice Date • Standard Order Activity • Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• LNP	• Retail Residence and Business (POTS)

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• LNP	• 95% Due Dates Met ^a

^aDue to data structure issues, BellSouth is using a benchmark comparison for SEEM rather than the Truncated Z as stated in the Order.

P-13: LNP-Average Disconnect Timeliness Interval & Disconnect Timeliness Interval Distribution

Definition

Disconnect Timeliness is defined as the interval between the time ESI Number Manager receives the valid 'Number Ported' message from NPAC (signifying the CLEC 'Activate') until the time the Disconnect is completed in the Central Office switch. This interval effectively measures BellSouth responsiveness by isolating it from impacts that are caused by CLEC related activities.

Exclusions

- Canceled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.) where identifiable.

Business Rules

The Disconnect Timeliness interval is determined for each telephone number ported associated with a disconnect service order processed on an LSR during the reporting period. The Disconnect Timeliness interval is the elapsed time from when BellSouth receives a valid 'Number Ported' message in ESI Number Manager (signifying the CLEC 'Activate') for each telephone number ported until each telephone number on the service order is disconnected in the Central Office switch. Elapsed time for each ported telephone number is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the total number of selected telephone numbers disconnected in the reporting period.

Calculation

Disconnect Timeliness Interval = (a - b)

- a = Completion Date and Time in Central Office switch for each number on disconnect order
- b = Valid 'Number Ported' message received date & time

Average Disconnect Timeliness Interval = (c / d)

- c = Sum of all Disconnect Timeliness Intervals
- d = Total Number of disconnected numbers completed in reporting period

Disconnect Timeliness Interval Distribution (for each interval) = (e / f) X 100

- e = Disconnected numbers completed in "X" days
- f = Total disconnect numbers completed in reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
 - State, Region

Data Retained

Relating to CLEC Experience	Relating to BellSouth Experience
<ul style="list-style-type: none">• Order Number• Telephone Number / Circuit Number• Committed Due Date• Receipt Date / Time (ESI Number Manager)• Date/Time of Recent Change Notice	<ul style="list-style-type: none">• Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM LEVEL of Disaggregation	SQM Retail Analog/Benchmark
• LNP	• 95% within 15 Minutes

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

P-14: LNP-Total Service Order Cycle Time (TSOCT)

Definition

Total Service Order Cycle Time measures the interval from receipt of a valid service order request to the completion of the final service order associated with that service request.

Exclusions

- Canceled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.) where identifiable
- "L" appointment coded orders (indicating the customer has requested a later than offered interval)
- "S" missed appointment coded orders (indicating subscriber missed appointments), except for "SP" codes (indicating subscriber prior due date requested). This would include "S" codes assigned to subsequent due date changes.

Business Rules

The interval is determined for each order processed during the reporting period. This measurement combines three reports: FOC Timeliness, Average Order Completion Interval and Average Completion Notice Interval.

This interval starts with the receipt of a valid service order request and stops when a completion notice is sent to the CLEC Interface (LENS, TAG OR EDI). Elapsed time for each order is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the associated total number of orders completed. Orders that are worked on zero due dates are calculated with a .33 day interval (8 hours) in order to report a portion of a day interval. These orders are issued and worked/completed on the same day.

Reporting is by Fully Mechanized, Partially Mechanized and Non-Mechanized receipt of LSRs.

Calculation

Total Service Order Cycle Time = (a - b)

- a = Service Order Completion Notice Date
- b = Service Request Receipt Date

Average Total Service Order Cycle Time = (c / d)

- c = Sum of all Total Service Order Cycle Times
- d = Total Number Service Orders Completed in Reporting Period

Total Service Order Cycle Time Interval Distribution (for each interval) = (e / f) X 100

- e = Total Number of Service Orders Completed in "X" minutes/hours
- f = Total Number of Service Orders Received in Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Fully Mechanized; Partially Mechanized; Non-Mechanized
- Report in categories of < 10 lines/circuits; >= lines/circuits (except trunks)
- Intervals 0-5, 5-10, 10-15, 15-20, 20-25, 25-30, >= 30 Days. The interval breakout is: 0-5 = 0-4.99, 5-10 = 5-9.99, 10-15 = 10-14.99, 15-20 = 15-19.99, 20-25 = 20-24.99, 25-30 = 25-29.99, >= 30 = 30 and greater.

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Interval for FOC• CLEC Company Name (OCN)• Order Number (PON)• Submission Date & Time (TICKET_ID)• Completion Date (CMPLTN_DT)• Completion Notice Date and Time• Service Type (CLASS_SVC_DESC)• Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file</p>	<ul style="list-style-type: none">• Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• LNP	<ul style="list-style-type: none">• Diagnostic

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• Not Applicable	<ul style="list-style-type: none">• Not Applicable

Section 4: Maintenance & Repair

M&R-1: Missed Repair Appointments

Definition

The percent of trouble reports not cleared by the committed date and time.

Exclusions

- Trouble tickets canceled at the CLEC request
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble

Business Rules

The negotiated commitment date and time is established when the repair report is received. The cleared time is the date and time that BellSouth personnel clear the trouble and closes the trouble report in his/her Computer Access Terminal (CAT) or workstation. If this is after the Commitment time, the report is flagged as a “Missed Commitment” or a missed repair appointment. When the data for this measure is collected for BellSouth and a CLEC, it can be used to compare the percentage of the time repair appointments are missed due to BellSouth reasons. (No access reports are not part of this measure because they are not a missed appointment.)

Note: Appointment intervals vary with force availability in the POTS environment. Specials and Trunk intervals are standard interval appointments of no greater than 24 hours. Standalone LNP historical data is not available in the maintenance systems (LMOS or WFA).

Calculation

Percentage of Missed Repair Appointments = (a / b) X 100

- a = Count of Customer Troubles Not Cleared by the Quoted Commitment Date and Time
- b = Total Trouble reports closed in Reporting Period

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• CLEC Company Name• Submission Date & Time (TICKET_ID)• Completion Date (CMPLTN_DT)• Service Type (CLASS_SVC_DESC)• Disposition and Cause (CAUSE_CD & CAUSE_DESC)• Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none">• Report Month• BellSouth Company Code• Submission Date & Time• Completion Date• Service Type• Disposition and Cause (Non-Design /Non-Special Only)• Trouble Code (Design and Trunking Services)• Geographic Scope

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence	• Retail Residence
• Resale Business	• Retail business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN
• LNP (Standalone) (Not Available in Maintenance)	• Not Applicable
• 2W Analog Loop Design	• Retail Residence & Business Dispatch
• 2W Analog Loop Non - Design	• Retail Residence & Business (POTS) (Exclusion of Switch-Based Feature Troubles)
• UNE Loop + Port Combinations	• Retail Residence & Business
• UNE Switch Ports	• Retail Residence & Business (POTS)
• UNE Combo Other	• Retail Residence, Business and Design Dispatch
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL Provided to Retail
• UNE ISDN	• Retail ISDN – BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non - Design	• Retail Residence & Business
• Local Interconnection Trunks	• Parity with Retail
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	X

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Resale POTS	• Retail Residence and Business (POTS)
• Resale Design	• Retail Design
• UNE Loop + Port Combinations	• Retail Residence and Business
• UNE Loops	• Retail Residence and Business Dispatch
• UNE xDSL	• ADSL Provided to Retail
• UNE Line Sharing	• ADSL Provided to Retail
• Local Interconnection Trunks	• Parity with Retail

M&R-2: Customer Trouble Report Rate

Definition

Percent of initial and repeated customer direct or referred troubles reported within a calendar month per 100 lines/circuits in service.

Exclusions

- Trouble tickets canceled at the CLEC request
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble

Business Rules

Customer Trouble Report Rate is computed by accumulating the number of maintenance initial and repeated trouble reports during the reporting period. The resulting number of trouble reports are divided by the total “number of service” lines, ports or combination that exist for the CLECs and BellSouth respectively at the end of the report month.

Calculation

Customer Trouble Report Rate = (a / b) X 100

- a = Count of Initial and Repeated Trouble Reports closed in the Current Period
- b = Number of Service Access Lines in service at End of the Report Period

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• CLEC Company Name• Ticket Submission Date & Time (TICKET_ID)• Ticket Completion Date (CMPLTN_DT)• Service Type (CLASS_SVC_DESC)• Disposition and Cause (CAUSE_CD & CAUSE_DESC)• # Service Access Lines in Service at the end of period• Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none">• Report Month• BellSouth Company Code• Ticket Submission Date & Time• Ticket Completion Date• Service Type• Disposition and Cause (Non-Design /Non-Special Only)• Trouble Code (Design and Trunking Services)• # Service Access Lines in Service at the end of period• Geographic Scope

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence	• Retail Residence
• Resale Business	• Retail Business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN
• LNP (Standalone) (Not Available in Maintenance)	• Not Applicable

SQM Level of Disaggregation	SQM Analog/Benchmark
• 2W Analog Loop Design	• Retail Residence & Business Dispatch
• 2W Analog Loop Non - Design	• Retail Residence & Business (POTS) (Exclusion of Switch-Based Feature Troubles)
• UNE Loop + Port Combinations	• Retail Residence & Business
• UNE Switch Ports	• Retail Residence & Business (POTS)
• UNE Combo Other	• Retail Residence, Business and Design Dispatch
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL Provided to Retail
• UNE ISDN	• Retail ISDN – BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non - Design	• Retail Residence & Business
• Local Interconnection Trunks	• Parity with Retail
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Resale POTS	• Retail Residence and Business (POTS)
• Resale Design	• Retail Design
• UNE Loop + Port Combinations	• Retail Residence and Business
• UNE Loops	• Retail Residence and Business Dispatch
• UNE xDSL	• ADSL Provided to Retail
• UNE Line Sharing	• ADSL Provided to Retail
• Local Interconnection Trunks	• Parity with Retail

M&R-3: Maintenance Average Duration

Definition

The Average duration of Customer Trouble Reports from the receipt of the Customer Trouble Report to the time the trouble report is cleared.

Exclusions

- Trouble tickets canceled at the CLEC request
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble

Business Rules

For Average Duration the clock starts on the date and time of the receipt of a correct repair request. The clock stops on the date and time the service is restored and the BellSouth or CLEC customer is notified (when the technician completes the trouble ticket on his/her CAT or work systems).

Calculation

Maintenance Duration = (a - b)

- a = Date and Time of Service Restoration
- b = Date and Time Trouble Ticket was Opened

Average Maintenance Duration = (c / d)

- c = Total of all maintenance durations in the reporting period
- d = Total Closed Troubles in the reporting period

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Total Tickets (LINE_NBR) • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMPLTN_DT) • Service Type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • Report Month • Total Tickets • BellSouth Company Code • Ticket Submission Date • Ticket Submission Time • Ticket Completion Date • Ticket Completion Time • Total Duration Time • Service Type • Disposition and Cause (Non-Design /Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • Resale Residence 	<ul style="list-style-type: none"> • Retail Residence
<ul style="list-style-type: none"> • Resale Business 	<ul style="list-style-type: none"> • Retail Business

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex
• Resale ISDN	• Retail ISDN
• LNP (Standalone) (Not Available in Maintenance)	• Not Applicable
• 2W Analog Loop Design	• Retail Residence & Business Dispatch
• 2W Analog Loop Non - Design	• Retail Residence & Business (POTS) (Exclusion of Switch-Based Feature Troubles)
• UNE Loop + Port Combinations	• Retail Residence & Business
• UNE Switch Ports	• Retail Residence & Business (POTS)
• UNE Combo Other	• Retail Residence, Business and Design Dispatch
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL Provided to Retail
• UNE ISDN	• Retail ISDN – BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non - Design	• Retail Residence & Business
• Local Interconnection Trunks	• Parity with Retail
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Resale POTS	• Retail Residence and Business (POTS)
• Resale Design	• Retail Design
• UNE Loop + Port Combinations	• Retail Residence and Business
• UNE Loops	• Retail Residence and Business Dispatch
• UNE xDSL	• ADSL Provided to Retail
• UNE Line Sharing	• ADSL Provided to Retail
• Local Interconnection Trunks	• Parity with Retail

M&R-4: Percent Repeat Troubles within 30 Days

Definition

Closed trouble reports on the same line/circuit as a previous trouble report received within 30 calendar days as a percent of total troubles closed reported

Exclusions

- Trouble tickets canceled at the CLEC request
- BellSouth trouble reports associated with internal or administrative service
- Customer Provided Equipment (CPE) troubles or CLEC Equipment Trouble

Business Rules

Includes Customer trouble reports received within 30 days of an original Customer trouble report.

Calculation

Percent Repeat Troubles within 30 Days = $(a / b) \times 100$

- a = Count of closed Customer Troubles where more than one trouble report was logged for the same service line within a continuous 30 days
- b = Total Trouble Reports Closed in Reporting Period

Report Structure

- Dispatch/Non-Dispatch
- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Total Tickets (LINE_NBR) • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMLTN_DT) • Total and Percent Repeat Trouble Reports within 30 Days (TOT_REPEAT) • Service Type • Disposition and Cause (CAUSE_CD & CAUSE_DESC) • Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • Report Month • Total Tickets • BellSouth Company Code • Ticket Submission Date • Ticket Submission Time • Ticket Completion Date • Ticket Completion Time • Total and Percent Repeat Trouble Reports within 30 Days • Service Type • Disposition and Cause (Non-Design /Non-Special Only) • Trouble Code (Design and Trunking Services) • Geographic Scope

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence	• Retail Residence
• Resale Business	• Retail Business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale ISDN	• Retail ISDN
• LNP (Standalone) (Not Available in Maintenance)	• Not Applicable
• 2W Analog Loop Design	• Retail Residence & Business Dispatch
• 2W Analog Loop Non - Design	• Retail Residence & Business (POTS) (Exclusion of Switch-Based Feature Troubles)
• UNE Loop + Port Combinations	• Retail Residence & Business
• UNE Switch Ports	• Retail Residence and Business (POTS)
• UNE Combo Other	• Retail Residence, Business & Design Dispatch
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL Provided to Retail
• UNE ISDN	• Retail ISDN – BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non - Design	• Retail Residence & Business
• Local Interconnection Trunks	• Parity with Retail
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Resale POTS	• Retail Residence and Business (POTS)
• Resale Design	• Retail Design
• UNE Loop + Port Combinations	• Retail Residence and Business
• UNE Loops	• Retail Residence and Business Dispatch
• UNE xDSL	• ADSL Provided to Retail
• UNE Line Sharing	• ADSL Provided to Retail
• Local Interconnection Trunks	• Parity with Retail

M&R-5: Out of Service (OOS) > 24 Hours

Definition

For Out of Service Troubles (no dial tone, cannot be called or cannot call out) the percentage of Total OOS Troubles cleared in excess of 24 hours. (All design services are considered to be out of service).

Exclusions

- Trouble Reports canceled at the CLEC request
- BellSouth Trouble Reports associated with administrative service
- Customer Provided Equipment (CPE) Troubles or CLEC Equipment Troubles

Business Rules

Customer Trouble reports that are out of service and cleared in excess of 24 hours. The clock begins when the trouble report is created in LMOS/WFA and the trouble is counted if the elapsed time exceeds 24 hours.

Calculation

Out of Service (OOS) > 24 hours = (a / b) X 100

- a = Total Cleared Troubles OOS > 24 Hours
- b = Total OOS Troubles in Reporting Period

Report Structure

- Dispatch/Non - Dispatch
- CLEC Specific
- BellSouth Aggregate
- CLEC Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Total Tickets • CLEC Company Name • Ticket Submission Date & Time (TICKET_ID) • Ticket Completion Date (CMLTN_DT) • Percentage of Customer Troubles out of • Service > 24 Hours (OOS>24_FLAG) • Service type (CLASS_SVC_DESC) • Disposition and Cause (CAUSE_CD & CAUSE-DESC) • Geographic Scope <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none"> • Report Month • Total Tickets • BellSouth Company Code • Ticket Submission Date • Ticket Submission time • Ticket Completion Date • Ticket Completion Time • Percent of Customer Troubles out of Service > 24 Hours • Service type • Disposition and Cause (Non-Design/Non-Special only) • Trouble Code (Design and Trunking Services) • Geographic Scope

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale Residence	• Retail Residence
• Resale Business	• Retail Business
• Resale Design	• Retail Design
• Resale PBX	• Retail PBX
• Resale Centrex	• Retail Centrex

SQM Level of Disaggregation	SQM Analog/Benchmark
• Resale ISDN	• Retail ISDN
• LNP (Standalone) (Not Available in Maintenance)	• Not Applicable
• 2W Analog Loop Design	• Retail Residence & Business Dispatch
• 2W Analog Loop Non - Design	• Retail Residence & Business (POTS) (Exclusion of Switch-Based Feature Troubles)
• UNE Loop + Port Combinations	• Retail Residence & Business
• UNE Switch Ports	• Retail Residence & Business (POTS)
• UNE Combo Other	• Retail Residence, Business and Design Dispatch
• UNE xDSL (HDSL, ADSL and UCL)	• ADSL Provided to Retail
• UNE ISDN	• Retail ISDN – BRI
• UNE Line Sharing	• ADSL Provided to Retail
• UNE Other Design	• Retail Design
• UNE Other Non - Design	• Retail Residence & Business
• Local Interconnection Trunks	• Parity with Retail
• Local Transport (Unbundled Interoffice Transport)	• Retail DS1/DS3 Interoffice

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

M&R-6: Average Answer Time – Repair Centers

Definition

This measures the average time a customer is in queue when calling a BellSouth Repair Center.

Exclusions

None

Business Rules

The clock starts when a CLEC Representative or BellSouth customer makes a choice on the Repair Center's menu and is put in queue for the next repair attendant. The clock stops when the repair attendant answers the call (abandoned calls are not included).

Note: The Total Column is a combined BellSouth Residence and Business number.

Calculation

Answer Time for BellSouth Repair Centers = (a - b)

- a = Time BellSouth Repair Attendant Answers Call
- b = Time of entry into queue after ACD Selection

Average Answer Time for BellSouth Repair Centers = (c / d)

- c = Sum of all Answer Times
- d = Total number of calls by reporting period

Report Structure

- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
• CLEC Average Answer Time	• BellSouth Average Answer Time

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Region. CLEC/BellSouth Service Centers and BellSouth Repair Centers are regional.	• For CLEC, Average Answer Times in UNE Center and BRMC are comparable to the Average Answer Times in the BellSouth Repair Centers.

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

M&R-6: Average Answer Time – Repair Centers

M&R-7: Mean Time To Notify CLEC of Network Outages

Definition

This report measures the time it takes for the BellSouth Network Management Center (NMC) to notify the CLEC of major network outages.

Exclusions

None

Business Rules

BellSouth will inform the CLEC of any major network outages (key customer accounts) via a page or email. When the BellSouth NMC becomes aware of a network incident, the CLEC and BellSouth will be notified electronically. The notification time for each outage will be measured in minutes and divided by the number of outages for the reporting period. These are broadcast messages. It is up to those receiving the message to determine if they have customers affected by the incident.

The CLECs will be notified in accordance with the rules outlined in Appendix D of the CLEC "Customer Guide" which is published on the internet at: www.interconnection.bellsouth.com/guides/other_guides/html/gopue/indexf.htm.

Calculation

Time to Notify CLEC = (a - b)

- a = Date and Time BellSouth Notified CLEC
- b = Date and Time BellSouth Detected Network Incident

Mean Time to Notify CLEC = (c / d)

- c = Sum of all Times to Notify CLEC
- d = Count of Network Incidents

Report Structure

- BellSouth Aggregate
- CLEC Aggregate
- CLEC Specific

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Major Network Events• Date/Time of Incident• Date/Time of Notification	<ul style="list-style-type: none">• Report Month• Major Network Events• Date/Time of Incident• Date/Time of Notification

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• BellSouth Aggregate• CLEC Aggregate• CLEC Specific	<ul style="list-style-type: none">• Parity by Design

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

M&R-7: Mean Time To Notify CLEC of Network Outages

Section 5: Billing

B-1: Invoice Accuracy

Definition

This measure provides the percentage of accuracy of the billing invoices rendered to CLECs during the current month.

Exclusions

- Adjustments not related to billing errors (e.g., credits for service outage, special promotion credits, adjustments to satisfy the customer)
- Test Accounts

Business Rules

The accuracy of billing invoices delivered by BellSouth to the CLEC must enable them to provide a degree of billing accuracy comparative to BellSouth bills rendered to retail customers of BellSouth. CLECs request adjustments on bills determined to be incorrect. The BellSouth Billing verification process includes manually analyzing a sample of local bills from each bill period. The bill verification process draws from a mix of different customer billing options and types of service. An end-to-end auditing process is performed for new products and services. Internal measurements and controls are maintained on all billing processes.

Calculation

$$\text{Invoice Accuracy} = [(a - b) / a] \times 100$$

- a = Absolute Value of Total Billed Revenues during current month
- b = Absolute Value of Billing Related Adjustments during current month

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
 - Region
 - State

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Invoice Type<ul style="list-style-type: none">- UNE- Resale- Interconnection• Total Billed Revenue• Billing Related Adjustments	<ul style="list-style-type: none">• Report Month• Retail Type<ul style="list-style-type: none">- CRIS- CABS• Total Billed Revenue• Billing Related Adjustments

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Product/Invoice Type<ul style="list-style-type: none">- Resale- UNE- Interconnection	<ul style="list-style-type: none">• CLEC Invoice Accuracy is comparable to BellSouth Invoice Accuracy

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	X

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• CLEC State• BellSouth State	<ul style="list-style-type: none">• Parity With Retail

B-2: Mean Time to Deliver Invoices

Definition

Bill Distribution is calculated as follows: CRIS BILLS-The number of workdays is reported for CRIS bills. This is calculated by counting the Bill Period date as the first work day. Weekends and holidays are excluded when counting workdays. J/N Bills are counted in the CRIS work day category for the purposes of the measurement since their billing account number (Q account) is provided from the CRIS system.

CABS BILLS-The number of calendar days is reported for CABS bills. This is calculated by counting the day following the Bill Period date as the first calendar day. Weekends and holidays are included when counting the calendar days.

Exclusions

Any invoices rejected due to formatting or content errors.

Business Rules

This report measures the mean interval for timeliness of billing records delivered to CLECs in an agreed upon format. CRIS-based invoices are measured in business days, and CABS-based invoices in calendar days.

Calculation

Invoice Timeliness = (a - b)

- a = Invoice Transmission Date
- b = Close Date of Scheduled Bill Cycle

Mean Time To Deliver Invoices = (c / d)

- c = Sum of all Invoice Timeliness intervals
- d = Count of Invoices Transmitted in Reporting Period

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
 - Region
 - State

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Invoice Type<ul style="list-style-type: none">- UNE- Resale- Interconnection• Invoice Transmission Count• Date of Scheduled Bill Close	<ul style="list-style-type: none">• Report Month• Invoice Type<ul style="list-style-type: none">- CRIS- CABS• Invoice Transmission Count• Date of Scheduled Bill Close

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Product/Invoice Type <ul style="list-style-type: none">• Resale• UNE• Interconnection	<ul style="list-style-type: none">• CRIS-based invoices will be released for delivery within six (6) business days.• CABS-based invoices will be released for delivery within eight (8) calendar days.• CLEC Average Delivery Intervals for both CRIS and CABS Invoices are comparable to BellSouth Average delivery for both systems.

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	X

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• CLEC State<ul style="list-style-type: none">- CRIS- CABS• BellSouth Region	<ul style="list-style-type: none">• Parity with Retail

B-3: Usage Data Delivery Accuracy

Definition

This measurement captures the percentage of recorded usage that is delivered error free and in an acceptable format to the appropriate Competitive Local Exchange Carrier (CLEC). These percentages will provide the necessary data for use as a comparative measurement for BellSouth performance. This measurement captures Data Delivery Accuracy rather than the accuracy of the individual usage recording.

Exclusions

None

Business Rules

The accuracy of the data delivery of usage records delivered by BellSouth to the CLEC must enable them to provide a degree of accuracy comparative to BellSouth bills rendered to their retail customers. If errors are detected in the delivery process, they are investigated, evaluated and documented. Errors are corrected and the data retransmitted to the CLEC.

Calculation

Usage Data Delivery Accuracy = $(a - b) / a \times 100$

- a = Total number of usage data packs sent during current month
- b = Total number of usage data packs requiring retransmission during current month

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Geographic Scope
 - Region

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Record Type<ul style="list-style-type: none">- BellSouth Recorded- Non-BellSouth Recorded	<ul style="list-style-type: none">• Report Month• Record Type

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Region	<ul style="list-style-type: none">• CLEC Usage Data Delivery Accuracy is comparable to BellSouth Usage Data Delivery Accuracy

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• CLEC State• BellSouth Region	<ul style="list-style-type: none">• Parity With Retail

B-4: Usage Data Delivery Completeness

Definition

This measurement provides percentage of complete and accurately recorded usage data (usage recorded by BellSouth and usage recorded by other companies and sent to BellSouth for billing) that is processed and transmitted to the CLEC within thirty (30) days of the message recording date. A parity measure is also provided showing completeness of BellSouth messages processed and transmitted via CMDS. BellSouth delivers its own retail usage from recording location to billing location via CMDS as well as delivering billing data to other companies. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.

Exclusions

None

Business Rules

The purpose of these measurements is to demonstrate the level of quality of usage data delivered to the appropriate CLEC. Method of delivery is at the option of the CLEC.

Calculation

Usage Data Delivery Completeness = (a / b) X 100

- a = Total number of Recorded usage records delivered during current month that are within thirty (30) days of the message recording date
- b = Total number of Recorded usage records delivered during the current month

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate
- Region

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Record Type<ul style="list-style-type: none">- BellSouth Recorded- Non-BellSouth Recorded	<ul style="list-style-type: none">• Report Month• Record Type

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Region	<ul style="list-style-type: none">• CLEC Usage Data Delivery Completeness is comparable to BellSouth Usage Data Delivery Completeness

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

B-4: Usage Data Delivery Completeness

B-5: Usage Data Delivery Timeliness

Definition

This measurement provides a percentage of recorded usage data (usage recorded by BellSouth and usage recorded by other companies and sent to BellSouth for billing) that is delivered to the appropriate CLEC within six (6) calendar days from the receipt of the initial recording. A parity measure is also provided showing timeliness of BellSouth messages processed and transmitted via CMD5. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.

Exclusions

None

Business Rules

The purpose of this measurement is to demonstrate the level of timeliness for processing and transmission of usage data delivered to the appropriate CLEC. The usage data will be mechanically transmitted or mailed to the CLEC data processing center once daily. The Timeliness interval of usage recorded by other companies is measured from the date BellSouth receives the records to the date BellSouth distributes to the CLEC. Method of delivery is at the option of the CLEC.

Calculation

Usage Data Delivery Timeliness Current month = (a / b) X 100

- a = Total number of usage records sent within six (6) calendar days from initial recording/receipt
- b = Total number of usage records sent

Report Structure

- CLEC Aggregate
- CLEC Specific
- BellSouth Aggregate
- Region

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Record Type<ul style="list-style-type: none">- BellSouth Recorded- Non-BellSouth Recorded	<ul style="list-style-type: none">• Report Month• Record Type

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Region	<ul style="list-style-type: none">• CLEC Usage Data Delivery Timeliness is comparable to BellSouth Usage Data Delivery Timeliness

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

B-6: Mean Time to Deliver Usage

Definition

This measurement provides the average time it takes to deliver Usage Records to a CLEC. A parity measure is also provided showing timeliness of BellSouth messages processed and transmitted via CMDS. Timeliness, Completeness and Mean Time to Deliver Usage measures are reported on the same report.

Exclusions

None

Business Rules

The purpose of this measurement is to demonstrate the average number of days it takes BellSouth to deliver Usage data to the appropriate CLEC. Usage data is mechanically transmitted or mailed to the CLEC data processing center once daily. Method of delivery is at the option of the CLEC.

Calculation

Mean Time to Deliver Usage = $(a \times b) / c$

- a = Volume of Records Delivered
- b = Estimated number of days to deliver
- c = Total Record Volume Delivered

Note: Any usage record falling in the 30+ day interval will be added using an average figure of 31.5 days.

Report Structure

- CLEC Aggregate
- CLEC Specific
- BellSouth Aggregate
- Region

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Record Type<ul style="list-style-type: none">- BellSouth Recorded- Non-BellSouth Recorded	<ul style="list-style-type: none">• Report Month• Record Type

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Region	<ul style="list-style-type: none">• Mean Time to Deliver Usage to CLEC is comparable to Mean Time to Deliver Usage to BellSouth.

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

B-6: Mean Time to Deliver Usage

B-7: Recurring Charge Completeness

Definition

This measure captures percentage of fractional recurring charges appearing on the correct bill.

Exclusions

None

Business Rules

The effective date of the recurring charge must be within 30 days of the bill date for the charge to appear on the correct bill.

Calculation

Recurring Charge Completeness = (a / b) X 100

- a = Count of fractional recurring charges that are on the correct bill¹
- b = Total count of fractional recurring charges that are on the correct bill

¹Correct bill = next available bill

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Invoice Type• Total Recurring Charges Billed• Total Billed on Time	<ul style="list-style-type: none">• Report Month• Retail Analog• Total Recurring Charges Billed• Total Billed on Time

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Product/Invoice Type	
<ul style="list-style-type: none">• Resale	<ul style="list-style-type: none">• Parity
<ul style="list-style-type: none">• UNE	<ul style="list-style-type: none">• Benchmark 90%
<ul style="list-style-type: none">• Interconnection	<ul style="list-style-type: none">• Benchmark 90%

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

B-7: Recurring Charge Completeness

B-8: Non-Recurring Charge Completeness

Definition

This measure captures percentage of non-recurring charges appearing on the correct bill.

Exclusions

None

Business Rules

The effective date of the non-recurring charge must be within 30 days of the bill date for the charge to appear on the correct bill.

Calculation

Non-Recurring Charge Completeness = (a / b) X 100

- a = Count of non-recurring charges that are on the correct bill¹
- b = Total count of non-recurring charges that are on the correct bill

¹Correct bill = next available bill

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• Invoice Type• Total Non-recurring Charges Billed• Total Billed on Time	<ul style="list-style-type: none">• Report Month• Retail Analog• Total Non-recurring Charges Billed• Total Billed on Time

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Product/Invoice Type	
<ul style="list-style-type: none">• Resale	<ul style="list-style-type: none">• Parity
<ul style="list-style-type: none">• UNE	<ul style="list-style-type: none">• Benchmark 90%
<ul style="list-style-type: none">• Interconnection	<ul style="list-style-type: none">• Benchmark 90%

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

B-8: Non-Recurring Charge Completeness

Section 6: Operator Services And Directory Assistance

OS-1: Speed to Answer Performance/Average Speed to Answer - Toll

Definition

Measurement of the average time in seconds calls wait before answered by a toll operator.

Exclusions

None

Business Rules

The clock starts when the customer enters the queue and the clock stops when a BellSouth representative answers the call or the customer abandons the call. The length of each call is determined by measuring, using a scanning technique, and accumulating the elapsed time from the entry of a customer call into the BellSouth call management system queue until the customer call is abandoned or transferred to BellSouth personnel assigned to handle calls for assistance. The system makes no distinction between CLEC customers and BellSouth customers.

Calculation

Speed to Answer Performance/Average Speed to Answer - Toll = a / b

- a = Total queue time
- b = Total calls answered

Note: Total queue time includes time that answered calls wait in queue as well as time abandoned calls wait in queue prior to abandonment.

Report Structure

- Reported for the aggregate of BellSouth and CLECs
 - State

Data Retained (on Aggregate Basis)

- For the items below, BellSouth's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP
- Month
- Call Type (Toll)
- Average Speed of Answer

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• None	• Parity by Design

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

OS-2: Speed to Answer Performance/Percent Answered with “X” Seconds - Toll

Definition

Measurement of the percent of toll calls that are answered in less than ten seconds.

Exclusions

None

Business Rules

The clock starts when the customer enters the queue and the clock stops when a BellSouth representative answers the call or the customer abandons the call. The length of each call is determined by measuring, using a scanning technique, and accumulating the elapsed time from the entry of a customer call into the BellSouth call management system queue until the customer call is abandoned or transferred to BellSouth personnel assigned to handle calls for assistance. The system makes no distinction between CLEC customers and BellSouth customers.

Calculation

The Percent Answered within “X” Seconds measurement for toll is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within “X” seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.

Report Structure

- Reported for the aggregate of BellSouth and CLECs
 - State

Data Retained (on Aggregate Basis)

- For the items below, BellSouth’s Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP
- Month
- Call Type (Toll)
- Average Speed of Answer

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• None	• Parity by Design

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

DA-1: Speed to Answer Performance/Average Speed to Answer - Directory Assistance (DA)

Definition

Measurement of the average time in seconds calls wait before answered by a DA operator.

Exclusions

None

Business Rules

The clock starts when the customer enters the queue and the clock stops when a BellSouth representative answers the call or the customer abandons the call. The length of each call is determined by measuring, using a scanning technique, and accumulating the elapsed time from the entry of a customer call into the BellSouth call management system queue until the customer call is abandoned or transferred to BellSouth personnel assigned to handle calls for assistance. The system makes no distinction between CLEC customers and BellSouth customers.

Calculation

Speed to Answer Performance/Average Speed to Answer – Directory Assistance (DA) = a / b

- a = Total queue time
- b = Total calls answered

Note: Total queue time includes time that answered calls wait in queue as well as time abandoned calls wait in queue prior to abandonment.

Report Structure

- Reported for the aggregate of BellSouth and CLECs
 - State

Data Retained (on Aggregate Basis)

- For the items below, BellSouth's Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP
- Month
- Call Type (DA)
- Average Speed of Answer

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• None	• Parity by Design

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

DA-1: Speed to Answer Performance/Average Speed to Answer - Directory Assistance (DA)

DA-2: Speed to Answer Performance/Percent Answered within “X” Seconds - Directory Assistance (DA)

Definition

Measurement of the percent of DA calls that are answered in less than twelve seconds.

Exclusions

None

Business Rules

The clock starts when the customer enters the queue and the clock stops when a BellSouth representative answers the call or the customer abandons the call. The length of each call is determined by measuring, using a scanning technique, and accumulating the elapsed time from the entry of a customer call into the BellSouth call management system queue until the customer call is abandoned or transferred to BellSouth personnel assigned to handle calls for assistance. The system makes no distinction between CLEC customers and BellSouth customers.

Calculation

The Percent Answered within “X” Seconds measurement for DA is derived by using the BellCore Statistical Answer Conversion Tables, to convert the Average Speed to Answer measure into a percent of calls answered within “X” seconds. The BellCore Conversion Tables are specific to the defined parameters of work time, number of operators, max queue size and call abandonment rates.

Report Structure

- Reported for the aggregate of BellSouth and CLECs
 - State

Data Retained (on Aggregate Basis)

- For the items below, BellSouth’s Performance Measurement Analysis Platform (PMAP) receives a final computation; therefore, no raw data file is available in PMAP.
- Month
- Call Type (DA)
- Average Speed of Answer

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• None	• Parity by Design

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

Section 7: Database Update Information

D-1: Average Database Update Interval

Definition

This report measures the interval from receipt of the database change request to the completion of the update to the database for Line Information Database (LIDB), Directory Assistance and Directory Listings. For E-911, see Section 8.

Exclusions

- Updates Canceled by the CLEC
- Initial update when supplemented by CLEC
- BellSouth updates associated with internal or administrative use of local services

Business Rules

The interval for this measure begins with the date and time stamp when a service order is completed and the completion notice is released to all systems to be updated with the order information including Directory Assistance, Directory Listings, and Line Information Database (LIDB). The end time stamp is the date and time of completion of updates to the system.

For BellSouth Results:

The BellSouth computation is identical to that for the CLEC with the clarifications noted below.

Other Clarifications and Qualification:

- For LIDB, the elapsed time for a BellSouth update is measured from the point in time when the BellSouth file maintenance process makes the LIDB update information available until the date and time reported by BellSouth that database updates are completed.
- Results for the CLECs are captured and reported at the update level by Reporting Dimension (see below).
- The Completion Date is the date upon which BellSouth issues the Update Completion Notice to the CLEC.
- If the CLEC initiates a supplement to the originally submitted update and the supplement reflects changes in customer requirements (rather than responding to BellSouth initiated changes), then the update submission date and time will be the date and time of BellSouth receipt of a syntactically correct update supplement. Update activities responding to BellSouth initiated changes will not result in changes to the update submission date and time used for the purposes of computing the update completion interval.
- Elapsed time is measured in hours and hundredths of hours rounded to the nearest tenth of an hour.
- Because this should be a highly automated process, the accumulation of elapsed time continues through off-schedule, weekends and holidays; however, scheduled maintenance windows are excluded.

Calculation

Update Interval = (a - b)

- a = Completion Date & Time of Database Update
- b = Submission Date and Time of Database Change

Average Update Interval = (c / d)

- c = Sum of all Update Intervals
- d = Total Number of Updates Completed During Reporting Period

Report Structure

- CLEC Specific (Under development)
- CLEC Aggregate
- BellSouth Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Database File Submission Time• Database File Update Completion Time• CLEC Number of Submissions• Total Number of Updates	<ul style="list-style-type: none">• Database File Submission Time• Database File Update Completion Time• BellSouth Number of Submissions• Total Number of Updates

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation:	SQM Analog/Benchmark:
Database Type <ul style="list-style-type: none">• LIDB• Directory Listings• Directory Assistance	<ul style="list-style-type: none">• Parity by Design

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• Not Applicable	<ul style="list-style-type: none">• Not Applicable

D-2: Percent Database Update Accuracy

Definition

This report measures the accuracy of database updates by BellSouth for Line Information Database (LIDB), Directory Assistance, and Directory Listings using a statistically valid sample of LSRs/Orders in a manual review. This manual review is not conducted on BellSouth Retail Orders.

Exclusions

- Updates canceled by the CLEC
- Initial update when supplemented by CLEC
- CLEC orders that had CLEC errors
- BellSouth updates associated with internal or administrative use of local services

Business Rules

For each update completed during the reporting period, the original update that the CLEC sent to BellSouth is compared to the database following completion of the update by BellSouth. An update is “completed without error” if the database completely and accurately reflects the activity specified on the original and supplemental update (order) submitted by the CLEC. Each database (LIDB, Directory Assistance, and Directory Listings) should be separately tracked and reported.

A statistically valid sample of CLEC Orders are pulled each month. That sample will be used to test the accuracy of the database update process. This is a manual process.

Calculation

Percent Update Accuracy = $(a / b) \times 100$

- a = Number of Updates Completed Without Error
- b = Number Updates Completed

Report Structure

- CLEC Aggregate
- CLEC Specific (not available in this report)
- BellSouth Aggregate (not available in this report)

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Report Month• CLEC Order Number (so_nbr) and PON (PON)• Local Service Request (LSR)• Order Submission Date• Number of Orders Reviewed <p>Note: Code in parentheses is the corresponding header found in the raw data file.</p>	<ul style="list-style-type: none">• Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
Database Type <ul style="list-style-type: none">• LIDB• Directory Assistance• Directory Listings	<ul style="list-style-type: none">• 95% Accurate

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

D-3: Percent NXXs and LRNs Loaded by the LERG Effective Date

Definition

Measurement of the percent of NXX(s) and Location Routing Numbers LRN(s) loaded in end office and/or tandem switches by the Local Exchange Routing Guide (LERG) effective date when facilities are in place. BellSouth has a single provisioning process for both NXX(s) and LRN(s). In this measure, BellSouth will identify whether or not a particular NXX has been flagged as LNP capable (set triggers for dips) by the LERG effective date.

An LRN is assigned by the owner of the switch and is placed into the software translations for every switch to be used as an administrative pointer to route NXX(s) in LNP capable switches. The LRN is a result of Local Number Porting and is housed in a national database provided by the Number Portability Administration Center (NPAC). The switch owner is responsible for notifying NPAC and requesting the effective date that will be reflected in the LERG. The national database downloads routing tables into BellSouth Service Control Point (SCP) regional databases, which are queried by switches when routing ported numbers.

The basic NXX routing process includes the addition of all NXX(s) in the response translations. This addition to response translations is what supports LRN routing. Routing instructions for all NXX(s), including LRN(s), are received from the Advance Routing & Trunking System (ARTS) and all routing, including response, is established based on the information contained in the Translation Work Instructions (TWINs) document.

Exclusions

- Activation requests where the CLEC's interconnection arrangements and facilities are not in place by the LERG effective date
- Expedite requests

Business Rules

Data for the initial NXX(s) and LRN(s) in a local calling area will be based on the LERG effective date or completion of the initial interconnection trunk group(s), whichever is longer. Data for additional NXX(s) in the local calling area will be based on the LERG effective date. The LERG effective date is loaded into the system at the request of the CLEC. It is contingent upon the CLEC to engineer, order, and install interconnection arrangements and facilities prior to that date.

The total Count of NXX(s) and LRN(s) that were scheduled to be loaded and those that were loaded by the LERG effective date in BellSouth switches will be captured in the Work Force Administration -Dispatch In database.

Calculation

Percent NXXs/LRNs Loaded and Tested Prior to the LERG Effective Date = $(a / b) \times 100$

- a = Count of NXXs and LRNs loaded by the LERG effective date
- b = Total NXXs and LRNs scheduled to be loaded by the LERG effective date

Report Structure

- CLEC Specific
- CLEC Aggregate
- BellSouth (Not Applicable)

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none">• Company Name• Company Code• NPA/NXX• LERG Effective Date• Loaded Date	<ul style="list-style-type: none">• Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">Geographic Scope- Region	<ul style="list-style-type: none">100% by LERG Effective Date

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">Not Applicable	<ul style="list-style-type: none">Not Applicable

D-3: Percent NXXs and LRNs Loaded by the LERG Effective Date

Section 8: E911

E-1: Timeliness

Definition

Measures the percent of batch orders for E911 database updates (to CLEC resale and BellSouth retail records) processed successfully within a 24-hour period.

Exclusions

- Any resale order canceled by a CLEC
- Facilities-based CLEC orders

Business Rules

The 24-hour processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Mechanical processing starts when SCC (the BellSouth E911 vendor) receives E911 files containing batch orders extracted from the BellSouth Service Order Control System (SOCS). Processing stops when SCC loads the individual records to the E911 database. The E911 database includes updates to the Automatic Location Identification (ALI) database. The system makes no distinction between CLEC resale records and BellSouth retail records.

Calculation

$$\text{E911 Timeliness} = (a / b) \times 100$$

- a = Number of batch orders processed within 24 hours
- b = Total number of batch orders submitted

Report Structure

Reported for the aggregate of CLEC resale updates and BellSouth retail updates

- State
- Region

Data Retained

- Report month
- Aggregate data

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• None	• Parity by Design

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

E-1: Timeliness

E-2: Accuracy

Definition

Measures the percent of E911 telephone number (TN) record updates (to CLEC resale and BellSouth retail records) processed successfully for E911 (including the Automatic Location Identification (ALI) database).

Exclusions

- Any resale order canceled by a CLEC
- Facilities-based CLEC orders

Business Rules

Accuracy is based on the number of records processed without error at the conclusion of the processing cycle. Mechanical processing starts when SCC (the BellSouth E911 vendor) receives E911 files containing telephone number (TN) records extracted from BellSouth's Service Order Control System (SOCS). The system makes no distinction between CLEC resale records and BellSouth retail records.

Calculation

$$\text{E911 Accuracy} = (a / b) \times 100$$

- a = Number of record individual updates processed with no errors
- b = Total number of individual record updates

Report Structure

Reported for the aggregate of CLEC resale updates and BellSouth retail updates

- State
- Region

Data Retained

- Report month
- Aggregate data

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• None	• Parity by Design

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

E-3: Mean Interval

Definition

Measures the mean interval processing of E911 batch orders (to update CLEC resale and BellSouth retail records) including processing against the Automatic Location Identification (ALI) database.

Exclusions

- Any resale order canceled by a CLEC
- Facilities-based CLEC orders

Business Rules

The processing period is calculated based on the date and time processing starts on the batch orders and the date and time processing stops on the batch orders. Data is posted in 4-hour increments up to and beyond 24 hours. The system makes no distinction between CLEC resale records and BellSouth retail records.

Calculation

$$\text{E911 Interval} = (a - b)$$

- a = Date and time of batch order completion
- b = Date and time of batch order submission

$$\text{E911 Mean Interval} = (c / d)$$

- c = Sum of all E911 Intervals
- d = Number of batch orders completed

Report Structure

Reported for the aggregate of CLEC resale updates and BellSouth retail updates

- State
- Region

Data Retained

- Report month
- Aggregate data

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• None	• Parity by Design

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

Section 9: Trunk Group Performance

TGP-1: Trunk Group Performance-Aggregate

Definition

The Trunk Group Performance report displays, over a reporting cycle, aggregate, average trunk group blocking data for each hour of each day of the reporting cycle, for both CLEC affecting and BellSouth affecting trunk groups.

Exclusions

- Trunk groups for which valid data is not available for an entire study period
- Duplicate trunk group information
- Trunk groups blocked due to CLEC network/equipment failure
- Trunk groups blocked due to CLEC delayed or refused orders
- Trunk groups blocked due to unanticipated significant increases in CLEC traffic
- Final groups actually overflowing, not blocked

Business Rules

The purpose of the Trunk Group Performance Report is to provide trunk blocking measurements on CLEC and BellSouth trunk groups for comparison only. It is not the intent of the report that it be used for network management and/or engineering.

Monthly Average Blocking:

- The reporting cycle includes both business and non-business days in a calendar month.
- Monthly average blocking values are calculated for each trunk group for each of the 24 time consistent hours across a reporting cycle.

Aggregate Monthly Blocking:

- Used to compare aggregate blocking across trunk groups which terminate traffic at CLEC points of presence versus BellSouth switches.
- Aggregate monthly blocking data is calculated for each hour of the day across all trunk groups assigned to a category.

Trunk Categorization:

This report displays, over a reporting cycle, aggregate, average blocking data for each hour of a day. Therefore, for each reporting cycle, 24 blocking data points are generated for two aggregate groups of selected trunk groups. These groups are CLEC affecting and BellSouth affecting trunk groups. In order to assign trunk groups to each aggregate group, all trunk groups are first assigned to a category. A trunk group's end points and the type of traffic that is transmitted on it define a category. Selected categories of trunk groups are assigned to the aggregate groups so that trunk reports can be generated. The categories to which trunk groups have been assigned for this report are as follows.

CLEC Affecting Categories:

	Point A	Point B
Category 1:	BellSouth End Office	BellSouth Access Tandem
Category 3:	BellSouth End Office	CLEC Switch
Category 4:	BellSouth Local Tandem	CLEC Switch
Category 5:	BellSouth Access Tandem	CLEC Switch
Category 10:	BellSouth End Office	BellSouth Local Tandem
Category 16:	BellSouth Tandem	BellSouth Tandem

BellSouth Affecting Categories:

	Point A	Point B
Category 9:	BellSouth End Office	BellSouth End Office

Calculation
Monthly Average Blocking:

- For each hour of the day, each day's raw data are summed across all valid measurements days in a report cycle for blocked and attempted calls.
- The sum of the blocked calls is divided by the total number of calls attempted in a reporting period.

Aggregate Monthly Blocking:

- For each hour of the day, the monthly sums of the blocked and attempted calls from each trunk group are separately aggregated over all trunk groups within each assigned category.
- The total blocked calls is divided by the total call attempts within a group to calculate an aggregate monthly blocking for each assigned group.
- The result is an aggregate monthly average blocking value for each of the 24 hours by group.
- The difference between the CLEC and BellSouth affecting trunk groups are also calculated for each hour.

Report Structure

- CLEC Aggregate
- BellSouth Aggregate
 - State

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Total Trunk Groups • Number of Trunk Groups by CLEC • Hourly Blocking Per Trunk Group • Hourly Usage Per Trunk Group • Hourly Call Attempts Per Trunk Group 	<ul style="list-style-type: none"> • Report Month • Total Trunk Groups • Aggregate Hourly Blocking Per Trunk Group • Hourly Usage Per Trunk Group • Hourly Call Attempts Per Trunk Group

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • CLEC aggregate • BellSouth aggregate 	<ul style="list-style-type: none"> • Any 2 hour period in 24 hours where CLEC blockage exceeds BellSouth blockage by more than 0.5% using trunk groups 1, 3, 4, 5, 10, 16 for CLECs and 9 for BellSouth

SEEM Measure

SEEM Measure		
Yes	Tier I	
	Tier II	X
	Tier III	X

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• CLEC Aggregate• BellSouth Aggregate	<ul style="list-style-type: none">• Any 2 hour period in 24 hours where CLEC blockage exceeds BellSouth blockage by more than 0.5% using trunk groups 1,3,4,5,10,16 for CLECs and 9 for BellSouth

TGP-1: Trunk Group Performance-Aggregate

TGP-2: Trunk Group Performance-CLEC Specific

Definition

The Trunk Group Performance report displays, over a reporting cycle, aggregate, average trunk group blocking data for each hour of each day of the reporting cycle, for both CLEC affecting and BellSouth affecting trunk groups.

Exclusions

- Trunk Groups for which valid data is not available for an entire study period
- Duplicate trunk group information
- Trunk groups blocked due to CLEC network/equipment failure
- Trunk groups blocked due to CLEC delayed or refused orders
- Trunk groups blocked due to unanticipated significant increases in CLEC traffic
- Final groups actually overflowing, not blocked

Business Rules

The purpose of the Trunk Group Performance Report is to provide trunk blocking measurements on CLEC and BellSouth trunk groups for comparison only. It is not the intent of the report that it be used for network management and/or engineering.

Monthly Average Blocking:

- The reporting cycle includes both business and non-business days in a calendar month.
- Monthly average blocking values are calculated for each trunk group for each of the 24 time consistent hours across a reporting cycle.

Aggregate Monthly Blocking:

- Used to compare aggregate blocking across trunk groups which terminate traffic at CLEC points of presence versus BellSouth switches.
- Aggregate monthly blocking data is calculated for each hour of the day across all trunk groups assigned to a category.

Trunk Categorization:

- This report displays, over a reporting cycle, aggregate, average blocking data for each hour of a day. Therefore, for each reporting cycle, 24 blocking data points are generated for two aggregate groups of selected trunk groups. These groups are CLEC affecting and BellSouth affecting trunk groups. In order to assign trunk groups to each aggregate group, all trunk groups are first assigned to a category. A trunk group's end points and the type of traffic that is transmitted on it define a category. Selected categories of trunk groups are assigned to the aggregate groups so that trunk reports can be generated. The categories to which trunk groups have been assigned for this report are as follows.

CLEC Affecting Categories:

	Point A	Point B
Category 1:	BellSouth End Office	BellSouth Access Tandem
Category 3:	BellSouth End Office	CLEC Switch
Category 4:	BellSouth Local Tandem	CLEC Switch
Category 5:	BellSouth Access Tandem	CLEC Switch
Category 10:	BellSouth End Office	BellSouth Local Tandem
Category 16:	BellSouth Tandem	BellSouth Tandem

BellSouth Affecting Categories:

	Point A	Point B
Category 9:	BellSouth End Office	BellSouth End Office

Calculation

Monthly Average Blocking:

- For each hour of the day, each day's raw data are summed across all valid measurements days in a report cycle for blocked and attempted calls.

- The sum of the blocked calls is divided by the total number of calls attempted in a reporting period.

Aggregate Monthly Blocking:

- For each hour of the day, the monthly sums of the blocked and attempted calls from each trunk group are separately aggregated over all trunk groups within each assigned category.
- The total blocked calls is divided by the total call attempts within a group to calculate an aggregate monthly blocking for each assigned group.
- The result is an aggregate monthly average blocking value for each of the 24 hours by group.
- The difference between the CLEC and BellSouth affecting trunk groups are also calculated for each hour.

Report Structure

- CLEC Specific
 - State

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Report Month • Total Trunk Groups • Number of Trunk Groups by CLEC • Hourly Blocking Per Trunk Group • Hourly Usage Per Trunk Group • Hourly Call Attempts Per Trunk Group 	<ul style="list-style-type: none"> • Report Month • Total Trunk Groups • Aggregate Hourly Blocking Per Trunk Group • Hourly Usage Per Trunk Group • Hourly Call Attempts Per Trunk Group

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • CLEC Trunk Group 	<ul style="list-style-type: none"> • Any 2 hour period in 24 hours where CLEC blockage exceeds BellSouth blockage by more than 0.5% using trunk groups 1, 3, 4, 5, 10, 16 for CLECs and 9 for BellSouth

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none"> • CLEC Trunk Group • BellSouth Trunk Group 	<ul style="list-style-type: none"> • Any 2 hour period in 24 hours where CLEC blockage exceeds BellSouth blockage by more than 0.5% using trunk groups 1, 3, 4, 5, 10, 16 for CLECs and 9 for BellSouth

Section 10: Collocation

C-1: Collocation Average Response Time

Definition

Measures the average time (counted in calendar days) from the receipt of a complete and accurate collocation application (including receipt of application fee if required) to the date BellSouth returns a response electronically or in writing. Within 10 calendar days after having received a bona fide application for physical collocation, BellSouth must respond as to whether space is available or not.

Exclusions

Any application canceled by the CLEC.

Business Rules

The clock starts on the date that BellSouth receives a complete and accurate collocation application accompanied by the appropriate application fee if required. The clock stops on the date that BellSouth returns a response. The clock will restart upon receipt of changes to the original application request.

Calculation

Response Time = (a - b)

- a = Request Response Date
- b = Request Submission Date

Average Response Time = (c / d)

- c = Sum of all Response Times
- d = Count of Responses Returned within Reporting Period

Report Structure

- Individual CLEC (alias) Aggregate
- Aggregate of all CLECs

Data Retained

- Report Period
- Aggregate Data

SQM Disaggregation - Analog/Benchmark

Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• State• Virtual-Initial• Virtual-Augment• Physical Caged-Initial• Physical Caged-Augment• Physical-Cageless-Initial• Physical Cageless-Augment	<ul style="list-style-type: none">• Virtual - 20 Calendar Days• Physical Caged - 30 Calendar Days• Physical Cageless - 30 Calendar Days

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

C-2: Collocation Average Arrangement Time

Definition

Measures the average time (counted in calendar days) from receipt of a complete and accurate Bona Fide firm order (including receipt of appropriate fee if required) to the date BellSouth completes the collocation arrangement and notifies the CLEC.

Exclusions

- Any Bona Fide firm order canceled by the CLEC
- Any Bona Fide firm order with a CLEC-negotiated interval longer than the benchmark interval

Business Rules

The clock starts on the date that BellSouth receives a complete and accurate Bone Fide firm order accompanied by the appropriate fee. The clock stops on the date that BellSouth completes the collocation arrangement and notifies the CLEC.

Calculation

Arrangement Time = (a - b)

- a = Date Collocation Arrangement is Complete
- b = Date Order for Collocation Arrangement Submitted

Average Arrangement Time = (c / d)

- c = Sum of all Arrangement Times
- d = Total Number of Collocation Arrangements Completed during Reporting Period

Report Structure

- Individual CLEC (alias) Aggregate
- Aggregate of all CLECs

Data Retained

- Report Period
- Aggregate Data

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • State • Virtual-Initial • Virtual-Augment • Physical Caged-Initial • Physical Caged-Augment • Physical Cageless-Initial • Physical Cageless-Augment 	<ul style="list-style-type: none"> • Virtual - 50 Calendar Days (Ordinary) • Virtual - 75 Calendar Days (Extraordinary) • Physical Caged - 90 Calendar Days • Physical Cageless - 60 Calendar Days (Ordinary) • Physical Cageless - 90 Calendar Days (Extraordinary)

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

C-2: Collocation Average Arrangement Time

C-3: Collocation Percent of Due Dates Missed

Definition

Measures the percent of missed due dates for both virtual and physical collocation arrangements.

Exclusions

Any Bona Fide firm order canceled by the CLEC.

Business Rules

Percent Due Dates Missed is the percent of total collocation arrangements which BellSouth is unable to complete by end of the BellSouth committed due date. The clock starts on the date that BellSouth receives a complete and accurate Bona Fide firm order accompanied by the appropriate fee if required. The arrangement is considered a missed due date if it is not completed on or before the committed due date.

Calculation

% of Due Dates Missed = (a / b) X 100

- a = Number of Completed Orders that were not completed within BellSouth Committed Due Date during Reporting Period
- b = Number of Orders Completed in Reporting Period

Report Structure

- Individual CLEC (alias) Aggregate
- Aggregate of all CLECs

Data Retained

- Report Period
- Aggregate Data

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• State• Virtual-Initial• Virtual-Augment• Physical Caged-Initial• Physical Caged-Augment• Physical Cageless-Initial• Physical Cageless-Augment	<ul style="list-style-type: none">• $\geq 95\%$ on time

SEEM Measure

SEEM Measure		
Yes	Tier I	X
	Tier II	X
	Tier III	X

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• All Collocation Arrangements	<ul style="list-style-type: none">• $\geq 95\%$ on time

Section 11: Change Management

CM-1: Timeliness of Change Management Notices

Definition

Measures whether CLECs receive required software release notices on time to prepare for BellSouth interface/system changes so CLEC interfaces are not impaired by change.

Exclusions

- Changes to release dates for reasons outside BellSouth control, such as the system software vendor changes. For example: a patch to fix a software problem.
- Type 6 Change Requests (Defects/Expedites), as defined by the Change Control Process (CCP)

Business Rules

This metric is designed to measure the percent of change management notices sent to the CLECs according to notification standards and time frames set forth in the Change Control Process. The CCP is used by BellSouth and the CLECs to manage requested changes to the BellSouth Local Interfaces.

The clock starts on the notification date. The clock stops on the software release date. When project events occur (scope changes, analysis information, etc.), the software release date may change. A revised notification would be required and the clock would restart. Based on release constraints for defects/expedites, notification may be less than the agreed upon interval in the CCP for new features.

Calculation

Timeliness of Change Management Notices = $(a / b) \times 100$

- a = Total number of Change Management Notifications Sent Within Required Timeframes
- b = Total Number of Change Management Notifications Sent

Report Structure

- BellSouth Aggregate

Data Retained

- Report Period
- Notice Date
- Release Date

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Region	• 95% >= 30 Days of Release

SEEM Measure

SEEM Measure		
Yes	Tier I	
	Tier II	X
	Tier III	X

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Region	• 95% >= 30 Days of Release

CM-2: Change Management Notice Average Delay Days

Definition

Measures the average delay days for change management system release notices sent outside the time frame set forth in the Change Control Process.

Exclusions

- Changes to release dates for reasons outside BellSouth control, such as the system software vendor changes. For example: a patch to fix a software problem
- Type 6 Change Requests (Defects/Expedites), as defined by the Change Control Process

Business Rules

This metric is designed to measure the percent of change management notices sent to the CLECs according to notification standards and time frames set forth in the Change Control Process. The CCP is used by BellSouth and the CLECs to manage requested changes to the BellSouth Local Interfaces.

The clock starts on the notification due date. The clock stops on the software release date. When project events occur (scope changes, analysis information, etc.), the software release date may change. A revised notification would be required and the clock would restart. Based on release constraints for defects/expedites, notification may be less than the agreed upon interval in the CCP for new features.

Calculation

Change Management Notice Delay Days = (a - b)

- a = Date Notice Sent
- b = Date Notice Due

Change Management Notice Average Delay Days = (c / d)

- c = Sum of all Change Management Notice Delay Days
- d = Total Number of Notices Sent Late

Report Structure

- BellSouth Aggregate

Data Retained

- Report Period
- Notice Date
- Release Date

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Region	• <= 8 Days

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

CM-3: Timeliness of Documents Associated with Change

Definition

Measures whether CLECs received requirements or business rule documentation on time to prepare for BellSouth interface/system changes so CLEC interfaces are not impaired by change.

Exclusions

- Documentation for release dates that slip less than 30 days for reasons outside BellSouth control, such as changes due to Regulatory mandate or CLEC request
- Type 6 Change Requests (Defects/Expedites), as defined by the Change Control Process

Business Rules

This metric is designed to measure the percent of requirements or business rule documentation sent to the CLECs according to documentation standards and timeframes set forth in the Change Control Process. The CCP is used by BellSouth and the CLECs to manage requested changes to the BellSouth Local Interfaces.

The clock starts on the business rule documentation release date. The clock stops on the software release date. When project events occur (scope changes, analysis information, etc.), the software release date may change. Revisions to documentation could be required and the clock would restart.

Calculation

Timeliness of Documents Associated with Change = $(a / b) \times 100$

- a = Change Management Documentation Sent Within Required Timeframes after Notices
- b = Total Number of Change Management Documentation Sent

Report Structure

- BellSouth Aggregate

Data Retained

- Report Period
- Notice Date
- Release Date

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none">• Region	<ul style="list-style-type: none">• 95% \geq 30 days if new features coding is required• 95% \geq 5 days for documentation defects, corrections or clarifications

SEEM Measure

SEEM Measure		
Yes	Tier I	
	Tier II	X
	Tier III	X

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• Region	<ul style="list-style-type: none">• 95% >= 30 days of the change

CM-3: Timeliness of Documents Associated with Change

CM-4: Change Management Documentation Average Delay Days

Definition

Measures the average delay days for requirements or business rule documentation sent outside the time frames set forth in the Change Control Process.

Exclusions

- Documentation for release dates that slip less than 30 days for reasons outside BellSouth control, such as changes due to Regulatory mandate or CLEC request
- Type 6 Change Requests (Defects/Expedites), as defined by the Change Control Process

Business Rules

This metric is designed to measure the percent of requirements or business rule documentation sent to the CLECs according to documentation standards and time frames set forth in the Change Control Process. The CCP is used by BellSouth and the CLECs to manage requested changes to the BellSouth Local Interfaces.

The clock starts on the business rule documentation release date. The clock stops on the software release date. When project events occur (scope changes, analysis information, etc.), the software release date may change. Revisions to documentation could be required and the clock would restart.

Calculation

Change Management Documentation Delay Days = (a - b)

- a = Date Documentation Provided
- b = Date Documentation Due

Change Management Documentation Average Delay Days = (c / d)

- c = Sum of all CM Documentation Delay Days
- d = Total Change Management Documents Sent

Report Structure

- BellSouth Aggregate

Data Retained

- Report Period
- Notice Date
- Release Date

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Region	• <= 8 Days

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

CM-5: Notification of CLEC Interface Outages

Definition

Measures the time it takes BellSouth to notify the CLEC of an outage of an interface.

Exclusions

None

Business Rules

This measure is designed to notify the CLEC of interface outages within 15 minutes of BellSouth's verification that an outage has taken place. This metric will be expressed as a percentage.

Calculation

Notification of CLEC Interface Outages = $(a / b) \times 100$

- a = Number of Interface Outages where CLECS are notified within 15 minutes
- b = Total Number of Interface Outages

Report Structure

- CLEC Aggregate

Data Retained

Relating to CLEC Experience	Relating to BellSouth Performance
<ul style="list-style-type: none"> • Number of Interface Outages • Number of Notifications <= 15 minutes 	<ul style="list-style-type: none"> • Not Applicable

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • By interface type for all interfaces accessed by CLECs 	<ul style="list-style-type: none"> • 97% in 15 Minutes

Interface	Applicable to
EDI	CLEC
CSOTS	CLEC
LENS	CLEC
TAG	CLEC
ECTA	CLEC
TAFI	CLEC/BellSouth

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

Section 12: Bona Fide / New Business Request Process

BFR-1: Percentage of BFR/NBR Requests Processed Within 30 Business Days

Definition

Percentage of Bona Fide/New Business Requests processed within 30 business days for the development and purchases of network elements not currently offered.

Exclusions

- Any application cancelled by the CLEC

Business Rules

The clock starts when BellSouth receives a complete and accurate application. The clock stops when BellSouth completes application processing for Network Elements that are not operational at the time of the request.

Calculation

Percentage of BFR/NBR Requests Processed Within 30 Business Days = $(a / b) \times 100$

- a = Count of number of requests processed within 30 days
- b = Total number of requests

Report Structure

- Individual CLEC (alias) Aggregate
- Aggregate of all CLECs

Data Retained

- Report Period
- Aggregate Data

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
• Region	• 90% <= 30 business days

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

BFR-1: Percentage of BFR/NBR Requests Processed Within 30 Business Days

BFR-2: Percentage of Quotes Provided for Authorized BFR/NBR Requests Processed Within X (10/30/60) Business Days

Definition

Percentage of quotes provided in response to Bona Fide/New Business Requests within X (10/30/60) business days for network elements not currently offered.

Exclusions

- Requests that are subject to pending arbitration

Business Rules

The clock starts when BellSouth receives a complete and accurate application. The clock stops when BellSouth responds back to the application with a price quote.

Calculation

Percentage of Quotes Provided for Authorized BFR/NBR Requests Processed Within X (10/30/60) Business Days = $(a / b) \times 100$

- a = Count of number of requests processed within “X” days
- b = Total number of requests
where “X” = 10, 30, or 60 days

Report Structure

- New Network Elements that are operational at the time of the request
- New Network Elements that are ordered by the FCC
- New Network Elements that are not operational at the time of the request

Data Retained

- Report Period
- Aggregate Data

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Analog/Benchmark
<ul style="list-style-type: none"> • Region 	<ul style="list-style-type: none"> • 90% <= 10/30/60 business days <ul style="list-style-type: none"> - Network Elements that are operational at the time of the request – 10 days - Network Elements that are Ordered by the FCC – 30 days - New Network Elements – 90 days

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

BFR-2: Percentage of Quotes Provided for Authorized BFR/NBR Requests Processed Within X (10/30/60) Business Days

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

BFR-2: Percentage of Quotes Provided for Authorized BFR/NBR Requests Processed Within X (10/30/60) Business Days

Appendix A: Reporting Scope

A-1: Standard Service Groupings

See individual reports in the body of the SQM.

A-2: Standard Service Order Activities

These are the generic BellSouth/CLEC service order activities which are included in the Pre-Ordering, Ordering, and Provisioning sections of this document. It is not meant to indicate specific reporting categories.

Service Order Activity Types

- Service Migrations Without Changes
- Service Migrations With Changes
- Move and Change Activities
- Service Disconnects (Unless noted otherwise)
- New Service Installations

Pre-Ordering Query Types

- Address
- Telephone Number
- Appointment Scheduling
- Customer Service Record
- Feature Availability
- Service Inquiry

Maintenance Query Types:

TAFI - TAFI queries the systems below

- CRIS
- March
- Predictor
- LMOS
 - DLR
 - DLETH
 - LMOSupd
- LNP
- NIW
- OSPCM
- SOCS

Report Levels

- CLEC RESH
- CLEC State
- CLEC Region
- Aggregate CLEC State

- Aggregate CLEC Region
- BellSouth State
- BellSouth Region

Appendix B: Glossary of Acronyms and Terms

Symbols used in calculations

- Σ A mathematical symbol representing the sum of a series of values following the symbol.
- A mathematical operator representing subtraction.
- + A mathematical operator representing addition.
- / A mathematical operator representing division.
- < A mathematical symbol that indicates the metric on the left of the symbol is less than the metric on the right.
- <= A mathematical symbol that indicates the metric on the left of the symbol is less than or equal to the metric on the right.
- > A mathematical symbol that indicates the metric on the left of the symbol is greater than the metric on the right.
- >= A mathematical symbol that indicates the metric on the left of the symbol is greater than or equal to the metric on the right.
- () Parentheses, used to group mathematical operations which are completed before operations outside the parentheses.

A

ACD: Automatic Call Distributor - A service that provides status monitoring of agents in a call center and routes high volume incoming telephone calls to available agents while collecting management information on both callers and attendants.

Aggregate: Sum total of all items in like category, e.g. CLEC aggregate equals the sum total of all CLECs' data for a given reporting level.

ALEC: Alternative Local Exchange Company = FL CLEC

ADSL: Asymmetrical Digital Subscriber Line

ASR: Access Service Request - A request for access service terminating delivery of carrier traffic into a Local Exchange Carrier's network.

ATLAS: Application for Telephone Number Load Administration System - The BellSouth Operations System used to administer the pool of available telephone numbers and to reserve selected numbers from the pool for use on pending service requests/service orders.

ATLASTN: ATLAS software contract for Telephone Number.

Auto Clarification: The number of LSRs that were electronically rejected from LESOG and electronically returned to the CLEC for correction.

B

BFR: Bona Fide Request

BILLING: The process and functions by which billing data is collected and by which account information is processed in order to render accurate and timely billing.

BOCRIS: Business Office Customer Record Information System (Front-end to the CRIS database.)

BRI: Basic Rate ISDN

BRC: Business Repair Center – The BellSouth Business Systems trouble receipt center which serves business and CLEC customers.

BellSouth: BellSouth Telecommunications, Inc.

C

CABS: Carrier Access Billing System

CCC: Coordinated Customer Conversions

CCP: Change Control Process

Centrex: A business telephone service, offered by local exchange carriers, which is similar to a Private Branch Exchange (PBX) but the switching equipment is located in the telephone company Central Office (CO).

CKTID: A unique identifier for elements combined in a service configuration

CLEC: Competitive Local Exchange Carrier

CLP: Competitive Local Provider = NC CLEC

CM: Change Management

CMDS: Centralized Message Distribution System - Telcordia administered national system used to transfer specially formatted messages among companies.

COFFI: Central Office Feature File Interface - Provides information about USOCs and class of service. COFFI is a part of DOE/SONGS. It indicates all services available to a customer.

COG: Corporate Gateway - Telcordia product designed for the electronic submission of xDSL Local Service Requests.

CRIS: Customer Record Information System - The BellSouth proprietary corporate database and billing system for non-access customers and services.

CRSACCTS: CRIS software contract for CSR information

CRSG: Complex Resale Support Group

C-SOTS: CLEC Service Order Tracking System

CSR: Customer Service Record

CTTG: Common Transport Trunk Group - Final trunk groups between BellSouth & Independent end offices and the BellSouth access tandems.

CWINS Center: Customer Wholesale Interconnection Network Services Center (formerly the UNE Center).

D

DA: Directory Assistance

Design: Design Service is defined as any Special or Plain Old Telephone Service Order which requires BellSouth Design Engineering Activities.

Disposition & Cause: Types of trouble conditions, e.g. No Trouble Found, Central Office Equipment, Customer Premises Equipment, etc.

DLETH: Display Lengthy Trouble History - A history report that gives all activity on a line record for trouble reports in LMOS.

DLR: Detail Line Record - All the basic information maintained on a line record in LMOS, e.g. name, address, facilities, features etc.

DS-0: The worldwide standard speed for one digital voice signal (64000 bps).

DS-1: 24 DS-0s (1.544Mb/sec., i.e. carrier systems)

DOE: Direct Order Entry System - An internal BellSouth service order entry system used by BellSouth Service Representatives to input business service orders in BellSouth format.

DOM: Delivery Order Manager - Telcordia product designed for the electronic submission of xDSL Local Service Requests.

DSAP: DOE (Direct Order Entry) Support Application - The BellSouth Operations System which assists a Service Representative or similar carrier agent in negotiating service provisioning commitments for non-designed services and Unbundled Network Elements.

DSAPDDI: DSAP software contract for schedule information.

DSL: Digital Subscriber Line

DUI: Database Update Information

E

E911: Provides callers access to the applicable emergency services bureau by dialing a 3-digit universal telephone number.

EDI: Electronic Data Interchange - The computer-to-computer exchange of inter and/or intra-company business documents in a public standard format.

ESSX: BellSouth Centrex Service

F

Fatal Reject: LSRs electronically rejected from LEO, which checks to see if the LSR has all the required fields correctly populated.

Flow-Through: In the context of this document, LSRs submitted electronically via the CLEC mechanized ordering process that flow through to the BellSouth OSS without manual or human intervention.

FOC: Firm Order Confirmation - A notification returned to the CLEC confirming that the LSR has been received and accepted, including the specified commitment date.

FX: Foreign Exchange

G H

HAL: “Hands Off” Assignment Logic - Front end access and error resolution logic used in interfacing BellSouth Operations Systems such as ATLAS, BOCRIS, LMOS, PSIMS, RSAG and SOCS.

HALCRIS: HAL software contract for CSR information

HDSL: High Density Subscriber Loop/Line

I J K

ILEC: Incumbent Local Exchange Company

INP: Interim Number Portability

ISDN: Integrated Services Digital Network

IPC: Interconnection Purchasing Center

L

LAN: Local Area Network

LAUTO: The automatic processor in the LNP Gateway that validates LSRs and issues service orders.

LCSC: Local Carrier Service Center - The BellSouth center which is dedicated to handling CLEC LSRs, ASRs, and Pre-ordering transactions along with associated expedite requests and escalations.

Legacy System: Term used to refer to BellSouth Operations Support Systems (see OSS)

LENS: Local Exchange Negotiation System - The BellSouth LAN/web server/OS application developed to provide both preordering and ordering electronic interface functions for CLECs.

LEO: Local Exchange Ordering - A BellSouth system which accepts the output of EDI, applies edit and formatting checks, and reformats the Local Service Requests in BellSouth Service Order format.

LERG: Local Exchange Routing Guide

LESOG: Local Exchange Service Order Generator - A BellSouth system which accepts the service order output of LEO and enters the Service Order into the Service Order Control System using terminal emulation technology.

LFACS: Loop Facilities Assessment and Control System

LIDB: Line Information Database

LISC: Local Interconnection Service Center - The center that issues trunk orders.

LMOS: Loop Maintenance Operations System - A BellSouth Operations System that stores the assignment and selected account information for use by downstream OSS and BellSouth personnel during provisioning and maintenance activities.

LMOS HOST: LMOS host computer

LMOSupd: LMOS updates

LMU: Loop Make-up

LMUS: Loop Make-up Service Inquiry

LNP: Local Number Portability - In the context of this document, the capability for a subscriber to retain his current telephone number as he transfers to a different local service provider.

Loops: Transmission paths from the central office to the customer premises.

LRN: Location Routing Number

LSR: Local Service Request – A request for local resale service or unbundled network elements from a CLEC.

M

Maintenance & Repair: The process and function by which trouble reports are passed to BellSouth and by which the related service problems are resolved.

MARCH: BellSouth Operations System which accepts service orders, interprets the coding contained in the service order image, and constructs the specific switching system Recent Change command messages for input into end office switches.

N

NBR: New Business Request

NC: “No Circuits” - All circuits busy announcement.

NIW: Network Information Warehouse

NMLI: Native Mode LAN Interconnection

NPA: Numbering Plan Area

NXX: The “exchange” portion of a telephone number.

O

OASIS: Obtain Availability Services Information System - A BellSouth front-end processor, which acts as an interface between COFFI and RNS. This system takes the USOCs in COFFI and translates them to English for display in RNS.

OASISBSN: OASIS software contract for feature/service

OASISCAR: OASIS software contract for feature/service

OASISLPC: OASIS software contract for feature/service

OASISMTN: OASIS software contract for feature/service

OASISNET: OASIS software contract for feature/service

OASISOCP: OASIS software contract for feature/service

ORDERING: The process and functions by which resale services or unbundled network elements are ordered from BellSouth as well as the process by which an LSR or ASR is placed with BellSouth.

OSPCM: Outside Plant Contract Management System - Provides Scheduling Information.

OSS: Operations Support System - A support system or database which is used to mechanize the flow or performance of work. The term is used to refer to the overall system consisting of hardware complex, computer operating system(s), and application which is used to provide the support functions.

Out Of Service: Customer has no dial tone and cannot call out.

P

PMAP: Performance Measurement Analysis Platform

PMQAP: Performance Measurement Quality Assurance Plan

PON: Purchase Order Number

POTS: Plain Old Telephone Service

PREDICTOR: The BellSouth Operations system which is used to administer proactive maintenance and rehabilitation activities on outside plant facilities, provide access to selected work groups (e.g. RRC & BRC) to Mechanized Loop Testing and switching system I/O ports, and provide certain information regarding the attributes and capabilities of outside plant facilities.

Preordering: The process and functions by which vital information is obtained, verified, or validated prior to placing a service request.

PRI: Primary Rate ISDN

Provisioning: The process and functions by which necessary work is performed to activate a service requested via an LSR or ASR and to initiate the proper billing and accounting functions.

PSIMS: Product/Service Inventory Management System - A BellSouth database Operations System which contains availability information on switching system features and capabilities and on BellSouth service availability. This database is used to verify the availability of a feature or service in an NXX prior to making a commitment to the customer.

PSIMSORB: PSIMS software contract for feature/service.

Q R

RNS: Regional Negotiation System - An internal BellSouth service order entry system used by BellSouth Consumer Services to input service orders in BellSouth format.

ROS: Regional Ordering System

RRC: Residence Repair Center - The BellSouth Consumer Services trouble receipt center which serves residential customers.

RSAG: Regional Street Address Guide - The BellSouth database, which contains street addresses validated to be accurate with state and local governments.

RSAGADDR: RSAG software contract for address search.

RSAGTN: RSAG software contract for telephone number search.

S

SAC: Service Advocacy Center

SEEM: Self Effectuating Enforcement Mechanism

SOCS: Service Order Control System - The BellSouth Operations System which routes service order images among BellSouth drop points and BellSouth Operations Systems during the service provisioning process.

SOG: Service Order Generator - Telcordia product designed to generate a service order for xDSL.

SOIR: Service Order Interface Record - any change effecting activity to a customer account by service order that impacts 911/E911

SONGS: Service Order Negotiation and Generation System.

T

TAFI: Trouble Analysis Facilitation Interface - The BellSouth Operations System that supports trouble receipt center personnel in taking and handling customer trouble reports.

TAG: Telecommunications Access Gateway – TAG was designed to provide an electronic interface, or machine-to-machine interface for the bi-directional flow of information between BellSouth's OSSs and participating CLECs.

TN: Telephone Number

Total Manual Fallout: The number of LSRs which are entered electronically but require manual entering into a service order generator.

U V

UNE: Unbundled Network Element

UCL: Unbundled Copper Link

USOC: Universal Service Order Code

W X Y Z

WATS: Wide Area Telephone Service

WFA: Work Force Administration

WMC: Work Management Center

WTN: Working Telephone Number.

Appendix C: BellSouth Audit Policy

BellSouth currently provides many CLECs with certain audit rights as a part of their individual interconnection agreements. However, it is not reasonable for BellSouth to undergo an audit of the SQM for every CLEC with which it has a contract. BellSouth has developed a proposed Audit Plan for use by the parties to an audit. If requested by a Public Service Commission or by a CLEC exercising contractual audit rights, BellSouth will agree to undergo a comprehensive audit of the aggregate level reports for both BellSouth and the CLEC(s) each of the next five (5) years (2001-2005) to be conducted by an independent third party. The results of that audit will be made available to all the parties subject to proper safeguards to protect proprietary information. This aggregate level audit includes the following specifications:

1. The cost shall be borne 50% by BellSouth and 50% by the CLEC or CLECs.
2. The independent third party auditor shall be selected with input from BellSouth, the PSC, if applicable, and the CLEC(s).
3. BellSouth, the PSC and the CLEC(s) shall jointly determine the scope of the audit.

BellSouth reserves the right to make changes to this audit policy as growth and changes in the industry dictate.

EXHIBIT NO. AJV-2

Alternative LNP Metrics

P-13B: Percentage of Time BellSouth Applies the 10-digit Trigger Prior to the LNP Order Due Date

Definition

Percentage of time BellSouth applies 10-digit trigger for LNP TNs prior to the due date.

Exclusions

- Excludes Remote Call Forwarding, DIDs, and ISDN Data TNs.
- Excludes CLEC or Customer caused misses or delays.

Business Rules

Obtain number of LNP TNs where the 10-digit trigger was applied prior to due date, and the total number of LNP TNs where the 10-digit trigger was applicable.

Calculation

Percentage of 10-Digit Trigger Applications = (a / b) X 100

- a = Count of LNP TNs for which 10-digit trigger was applied prior to due date
- b = Total LNP TNs for which 10-digit triggers were applicable

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
 - State, Region

Data Retained

Relating to CLEC Experience	Relating to BellSouth Experience
<ul style="list-style-type: none">• Order Number• Telephone Number/Circuit Number• Committed Due Date• Date/Time of Recent Change Notice	<ul style="list-style-type: none">• SOCS completion date and time stamp• CLEC Activate message

SQM Disaggregation – Analog/Benchmark

SQM Level of Disaggregation	SQM Retail Analog/Benchmark
<ul style="list-style-type: none">• LNP	<ul style="list-style-type: none">• <= 96.5%

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
<ul style="list-style-type: none">• Not Applicable	<ul style="list-style-type: none">• Not Applicable

P-13B: Percentage of Time BellSouth Applies the 10-digit Trigger Prior to the LNP Order Due Date

P-13C: Percent Out of Service < 60 Minutes

Definition

The Number of LNP related conversions where the time required to facilitate the activation of the port in BellSouth's network is less than 60 minutes, expressed as a percentage of total number of activations that took place.

Exclusions

- CLEC-caused errors.
- NPAC caused errors unless caused by BellSouth.
- Stand Alone LNP Orders with more than 500 number activations

Business Rules

The Start time is the Receipt of the NPAC broadcast activation message in BellSouth's LSMS. The End time is when the Provisioning event is successfully completed in BellSouth's network as reflected in BellSouth's LSMS. Count the number of activations that took place in less than 60 minutes.

Calculation

Percent Out of Service < 60 Minutes = (a / b) X 100

- a = Number of activations provisioned in less than 60 minutes
- b = Total LNP activations

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
 - State, Region

Data Retained

Relating to CLEC Experience	Relating to BellSouth Experience
<ul style="list-style-type: none">• Order Number• Telephone Number/Circuit Number• Committed Due Date• Date/Time of Recent Change Notice	<ul style="list-style-type: none">• SOCS completion date and time stamp• CLEC Activate message

SQM Disaggregation – Analog/Benchmark

SQM Level of Disaggregation	SQM Retail Analog/Benchmark
<ul style="list-style-type: none">• LNP	<ul style="list-style-type: none">• <=96.5%

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

P-13C: Percent Out of Service < 60 Minutes

P-13D: LNP-Average Disconnect Timeliness Interval & Disconnect Timeliness Interval Distribution (Non Trigger)

Definition

Disconnect Timeliness is defined as the interval between the time ESI Number Manager receives the valid “Number Ported” message from NPAC (signifying the CLEC “Activate”) until the time the Disconnect is completed in the Central Office switch. This interval effectively measures BellSouth responsiveness by isolating it from impacts that are caused by CLEC related activities.

Exclusions

- Canceled Service Orders
- Order Activities of BellSouth or the CLEC associated with internal or administrative use of local services (Record Orders, Listing Orders, Test Orders, etc.) where identifiable. Order types may be C, N, R, or T.
- CLEC-caused errors
- NPAC-caused errors, unless caused by BellSouth
- Incomplete Ports where only a subset of activate messages have been received compared with the LSR and create messages
- Orders which are candidates for 10 digit triggers, except those that did not receive 10 digit triggers prior to the port out date.

Business Rules

The Disconnect Timeliness interval is determined for each number ported associated with a disconnect service order processed on an LSR during the reporting period. The Disconnect Timeliness interval is the elapsed time from when BellSouth receives a valid “Number Ported” message in ESI Number Manager (signifying the CLEC “Activate”) for each telephone number ported until each number on the service order is disconnected in the Central Office switch. Elapsed time for each ported number is accumulated for each reporting dimension. The accumulated time for each reporting dimension is then divided by the total number of selected telephone numbers disconnected in the reporting period.

Calculation

Disconnect Timeliness Interval = (a - b)

- a = Completion Date and Time in Central Office switch for each number ported on disconnect order
- b = Valid “Number Ported” message received date and time

Average Disconnect Timeliness Interval = (c / d)

- c = Sum of all Disconnect Timeliness Intervals
- d = Total Number of disconnected numbers completed in reporting period

Disconnect Timeliness Interval Distribution (for each interval) = (e / f) X 100

- e = Disconnected numbers completed in “X” days
- f = Total disconnected numbers completed in reporting period

Report Structure

- CLEC Specific
- CLEC Aggregate
- Geographic Scope
 - State, Region

Data Retained

Relating to CLEC Experience	Relating to BellSouth Experience
<ul style="list-style-type: none">• Order Number• Telephone Number/Circuit Number• Committed Due Date• Date/Time of Recent Change Notice	<ul style="list-style-type: none">• SOCS completion date and time stamp• CLEC Activate message

SQM Disaggregation - Analog/Benchmark

SQM Level of Disaggregation	SQM Retail Analog/Benchmark
• LNP	• 95% <= 12 Hours

SEEM Measure

SEEM Measure		
No	Tier I	
	Tier II	
	Tier III	

SEEM Disaggregation - Analog/Benchmark

SEEM Disaggregation	SEEM Analog/Benchmark
• Not Applicable	• Not Applicable

EXHIBIT NO. AJV – 3

Analysis of Performance Measurements Data

ANALYSIS OF PERFORMANCE MEASUREMENTS DATA

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1 Attachments:

- 2 1B July 2001 Tennessee Summary Results
- 3 2B July 2001 Flow-Through Report
- 4 3B July 2001 Trunk Group Performance Report
- 5 1C August 2001 Tennessee Summary Results
- 6 2C August 2001 Flow-Through Report
- 7 3C August 2001 Trunk Group Performance Report
- 8 1D September 2001 Tennessee Summary Results
- 9 2D September 2001 Flow-Through Report
- 10 3D September 2001 Trunk Group Performance Report
- 11 1E October 2001 Tennessee Summary Results
- 12 2E October 2001 Flow-Through Report
- 13 3E October 2001 Trunk Group Performance Report
- 14 1F November 2001 Tennessee Summary Results
- 15 2F November 2001 Flow-Through Report
- 16 3F November 2001 Trunk Group Performance Report
- 17 1G December 2001 Tennessee Summary Results
- 18 2G December 2001 Flow-Through Report
- 19 3G December 2001 Trunk Group Performance Report
- 20 1H January 2002 Tennessee Summary Results
- 21 2H January 2002 Flow-Through Report
- 22 3H January 2002 Trunk Group Performance Report
- 23 2A Revised June Flow-Through Report

- | | | |
|---|---|---------------------------------------|
| 1 | 4 | November 2001 Georgia Summary Results |
| 2 | 5 | December 2001 Georgia Summary Results |
| 3 | 6 | January 2002 Georgia Summary Results |

ANALYSIS OF PERFORMANCE MEASUREMENTS DATA

I. INTRODUCTION

This Exhibit presents BellSouth's performance measurements data in Tennessee for July through December 2001 and January 2002. It also includes a detailed analysis of the performance data for November and December 2001 and January 2002. The data covers each of the twelve categories of measurements listed in the Interim Service Quality Measurements (SQM): (1) Operations Support Systems (OSS) / Pre-Ordering; (2) Ordering; (3) Provisioning including Customer Coordinated Conversions (CCC or Hot Cuts); (4) Maintenance and Repair; (5) Billing; (6) Operator Services (Toll) and Directory Assistance; (7) Database Update Information; (8) E911; (9) Trunk Group Performance; (10) Collocation; (11) Change Management; and (12) Bona Fide / New Business Request Process. Each of these categories is subdivided into measurements as described below. These measurements are further broken down into sub-metrics, which is the level at which performance data is actually provided. The results of the Tennessee performance measurements for the period of July through December 2001 and January 2002 are included as attachments AJV 1B – 1H, 2B – 2H and 3B – 3H. Also included is revised attachment AJV 2A for Flow Through results for the month of June 2001 that was restated based on a measurement calculation update.

1 **II. The Performance Measures Contained in the SQM**

2 Exhibit AJV-1 provides BellSouth's SQM as approved by the GPSC in Docket 7892-
3 U on January 16, 2001. The SQM includes detailed definitions, business rules,
4 calculations, exclusions, report structure and disaggregation for each of the
5 measurements. This information provides all of the detail necessary to understand
6 each measure and how it is applied.

7 **OSS/Pre-Ordering**

8
9 The OSS/Pre-ordering performance measurements cover the access and response to
10 preordering queries by CLECs, including inquiries for loop makeup information. OSS
11 Response Time data reflects the time that elapses between a request for information
12 between a representative (BellSouth or CLEC) sending a request from their interface
13 and receiving a response at their interface. The interface availability measures
14 validate the availability of the OSS systems for the CLECs. The loop makeup inquiry
15 measures track the timeliness of responses to CLEC requests for loop makeup
16 information for unbundled loops for potential DSL type services. The OSS/Pre-
17 Ordering performance measurements are as follows:

- 18 • Average Response Time and Response Intervals of BellSouth's
19 OSS to queries by CLECs (Pre-Ordering and Ordering);
- 20 • Interface Availability (Pre-Ordering and Ordering);

- 1 • Interface Availability (Maintenance & Repair);
- 2 • Response Intervals of BellSouth's OSS to queries by CLECs
- 3 (Maintenance and Repair);
- 4 • Loop Makeup – Response Time (manual); and
- 5 • Loop Makeup – Response Time (electronic).

6 BellSouth measures response time for Customer Service Records, Due Date
7 Availability, Address Validation, Product and Service Availability, and Telephone
8 Number Availability and Reservation. Contact Center availability (LCSC) is posted
9 on the BellSouth web site and therefore is not listed as a measurement.

10 Ordering

11

12 Performance data for the ordering category provides information as to the speed and
13 quality of BellSouth's processing of local service requests ("LSRs") for the CLECs.
14 Because the ordering portion of the process for CLECs is different from the ordering
15 process for BellSouth's retail operation, the majority of these measures are evaluated
16 against benchmarks rather than retail analogues. The Ordering performance
17 measurements are as follows:

- 18 • Acknowledgement Message Timeliness;

- 1 • Acknowledgement Message Completeness;
- 2 • Percentage of Flow-Through Service Requests – Summary;
- 3 • Achieved Percentage of Flow-Through Service Requests – Summary;
- 4 • Percentage of Rejected Service Requests;
- 5 • Rejection Interval;
- 6 • Firm Order Confirmation Timeliness;
- 7 • Service Inquiry with LSR Firm Order Confirmation Response Time Manual;
- 8 • Firm Order Confirmation and Reject Response Completeness;
- 9 • Speed of Answer in the Ordering Center;
- 10 • Percentage of Rejected Service Requests for Local Number Portability;
- 11 • Average Reject Interval for Local Number Portability; and
- 12 • Firm Order Confirmation Timeliness Average Interval for Local Number
- 13 Portability.

14 For most of the ordering measures, the disaggregation is by mechanized, partially
15 mechanized and manual LSRs for the products ordered by the GPSC for resale, UNEs
16 and local interconnection trunks.

Provisioning

Provisioning performance measurements address the quality and timeliness of installation services provided to CLECs. The Provisioning performance measurements are as follows:

- Mean Held Order Interval;
- Average Jeopardy Notice Interval and Percentage of Orders given Jeopardy Notices;
- Percentage of Missed Installation Appointments;
- Average Order Completion Interval;
- Average Completion Notice Interval;
- Percent Completions/Attempts without Notice or <24 hours Notice;
- Coordinated Customer Conversions (see the following paragraph for details of these measures);
- Cooperative Acceptance Testing - % of xDSL Loops Tested;
- Percentage of Troubles within 30 Days of Service Order Activity;
- Total Service Order Cycle Time;

- 1 • Service Order Accuracy;
- 2 • Percent Missed Installation Appointments for Local Number Portability;
- 3 • Average Disconnect Timeliness Interval for Local Number Portability;
- 4 and
- 5 • Total Service Order Cycle Time for Local Number Portability.

6 These metrics are disaggregated by specified products, by dispatched and non-
7 dispatched, by less than 10 circuits and equal to and greater than 10 circuits for resale,
8 UNEs and local interconnection trunks.

9 **Coordinated Customer Conversions (“CCC”) / (Hot Cuts)**

10

11 The measurements assessing the timeliness and correctness of BellSouth’s hot cut
12 process are as follows:

- 13 • CCC – UNE Loops w NP;
- 14 • CCC – UNE Loops w/o NP;
- 15 • CCC Timeliness Report – Precut;
- 16 • CCC Timeliness Report On Time;
- 17 • CCC Timeliness Report - Post Cut;

- CCC - Average Recovery Time; and
- Percent Installation Troubles within 7 days of Hot Cut.

Because BellSouth does not perform hot cuts for its retail operations, all of these measures are evaluated against benchmarks.

Maintenance and Repair

Maintenance and Repair measurements compare the maintenance, testing and operations of BellSouth retail and wholesale services. The SQM Maintenance and Repair performance measurements are as follows:

- Percentage of Missed Repair Appointments;
- Customer Trouble Report Rate;
- Maintenance Average Duration;
- Percentage of Repeat Troubles within 30 days;
- Percentage Out of Service greater than 24 hours;
- Average Answer Time for the Repair Center; and
- Mean Time to Notify CLEC of Network Outages.

1 These metrics are disaggregated by specified products and by dispatched and non-
2 dispatched services for resale, UNEs and local interconnection trunks.

3 **Billing**

4

5 The billing measurements are intended to capture the timeliness and accuracy of
6 BellSouth's billing services provided to CLECs. The Billing performance
7 measurements are as follows:

- 8 • Invoice Accuracy;
- 9 • Mean Time to Deliver Invoices;
- 10 • Usage Data Delivery Accuracy;
- 11 • Usage Data Delivery Completeness;
- 12 • Usage Data Delivery Timeliness;
- 13 • Mean Time to Deliver Usage;
- 14 • Recurring Charge Completeness; and
- 15 • Non-Recurring Charge Completeness.

The metrics are disaggregated by billed and adjusted revenues, Customer Record Information System (“CRIS”) and Carrier Access Billing System (“CABS”) data, and are generally compared against BellSouth’s retail operations.

Operator Services (“OS Toll”) and Directory Assistance (“DA”)

The purpose of these measures is to compare the operator functions for BellSouth retail and CLEC calls. The SQM OS/DA performance measurements are as follows:

- Average Speed of Answer (Toll);
- Average Speed of Answer (DA);
- Percent Answered within “X” Seconds (Toll); and
- Percent Answered with “X” Seconds (DA).

The equipment used by BellSouth provides parity by design. The switching and operator equipment functions on a per call basis without knowledge of the call’s origination.

Database Update Information